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GENEALOGY COLLECTION













The Cerne Giant.

PROCEEDINGS

1

of the

DORSET NATURAL HISTORY and ANTIQUARIAN FIELD CLUB

From MAY, 1921, to MAY, 1922.

Edited by

J. M. J. FLETCHER

VOLUME XLIII.

DORCHESTER:
Printed by F. G. Longman, at the Cornhill Press.

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The Dorset Hatural History and Antiquarian field Club.

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INAUGURATED MARCH 26TH, 1875.
                                                                        Presidents:
1875-1992—J. C. Mansel-Pleydell, Esq., B.A., F.G.S., F.L.S.
1902-1904—The Lord Eustace Cecil, F.R.G.S.
                    * Nelson M. Richardson, Esq., B.A.
                                                                  Vice-Presidents:
1875-1882—The Rev. H. H. Wood, M.A., F.G.S.
1875-1884—Professor James Buckman, F.S.A., F.G.S., F.L.S.
1880-1900—The Rev. Canon Sir Talbot Baker, Bart., M.A
1880-1900 — General Pitt-Rivers, F.R.S.
1880-1900 — General Pitt-Rivers, F.R.S.
1880-1917 — The Rev. O. Pickard-Cambridge, M.A., F.R.S., F.Z.S.
1885 — * The Earl of Moray, M.A., F.S.A. Scot, F.G.S.
1892-1904 - Nelson M. Richardson, Esq., B.A.
\frac{1900-1902}{1904-1921} The Lord Eustace Cecil, F.R.G.S.
1900-1909-W. H. Hudleston, Esq., M.A., F.R.S., F.G.S., F.L.S., Past Pres.
                                 Geol. Society:
1900-1904—Vaughan Cornish, Esq., D.Sc., F.C.S., F.R.G.S.
1900 * Captain G. R. Elwes.
1900-1916—H. Colley March, Esq., M.D., F.S.A.
1904 * The Rev. Herbert Pentin, M.A.
1904-1916—The Rev. W. Miles Barnes, B.A.
1904 * The Rev. Canon J. C. M. Mansel-Pleydell, M.A.
* His Honour J. S. Cual, F. S.A.
Captain John E. Acland, M.A., F.S.A.
Sir Daniel Morris, K.C.M.G., D.Sc., D.C.L., F.L.S.
The Rev. Canon J. M. J. Fletcher, M.A.
W. de C. Prideaux, Esq., F.S.A., F.R.S.M.
Vere L. Oliver, Esq., F.S.A.
1915
1916
 1918
1992
                                                                   Hon. Secretaries:
1875-1884 – Professor James Buckman, F.S.A., F.G.S., F.L.S.
1885-1892 – The Earl of Moray, M.A., F.S.A. Scot., F.G.S.
1892-1902 – Nelson M. Richardson, Esq., B.A.
1902-1904 – H. Colley March, Esq., M.D., F.S.A.
1904-1922 – The Rev. Herbert Pentin, M.A.
1922 * Vere L. Oliver, Esq., F.S.A.
1875-1882—The Rev. H. H. Wood, M.A., F.G.S.
1882-1900—The Rev. O. Pickard-Cambridge, M.A., F.R.S., F.Z.S.
1901-1910-Captain G. R. Elwes.
1910-1915—The Rev. Canon J. C. M. Mansel-Pleydell, M.A.
1915 * Captain John E. Acland, M.A., F.S.A.
1875-1884—Professor James Buckman, F.S.A., F.G.S., F.L.S.
1885-1892—The Earl of Moray, M.A., F.S.A. Scot., F.G.S.
1892-1901—Nelson M. Richardson, Esq., B.A.
1901-1906—The Rev. W. Miles Barnes, B.A.
1906-1909—The Rev. Herbert Pentin, M.A.
1909-1912—The Rev. C. W. H. Dicker, R.D.
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1912-1917—Henry Symonds, Esq., F.S.A. 1917 * The Rev. Canon J. M. J. Fletcher, M.A.

^{*} The asterisk indicates the present officials of the Club.

Rules

of the

Dorset Natural History and Antiquarian Field Club.

ORIECT AND CONSTITUTION.

1.—The Club shall be called The Dorset Natural History and Antiquarian Field Club, and shall have for a short title The Dorset Field Club.

The object of the Club is to promote and encourage an interest in the study of the Physical Sciences and Archæology generally, especially the Natural History of the County of Dorset and its Antiquities. Prehistoric records, and Ethnology. It shall use its influence to prevent, as far as possible, the extirpation of rare plants and animals, and to promote the preservation of the Antiquities of the County.

2.—The Club shall consist of (i.) three Officers, President, Honorary Secretary, and Honorary Treasurer, who shall be elected annually, and shall form the Executive body for its management; (ii.) Vice-Presidents, of whom the Honorary Secretary and Treasurer shall be two, ex officio; (iii.) The Honorary Editor of the Annual Volume of Proceedings; (iv.) Ordinary Members; (v.) Honorary Members. The President, Vice-Presidents, and Editor shall form a Council to decide questions referred to them by the Executive and to elect Honorary Members. The Editor shall be nominated by one of the incoming Executive and elected at the Annual Meeting.

There may also be one or more Honorary Assistant Secretaries, who shall be nominated by the Honorary Secretary, seconded by the President or Treasurer, and elected by the Members at the Annual Meeting.

Members may be appointed by the remaining Officers to fill interim vacancies in the Executive Body until the following Annual Meeting.

The number of the Club shall be limited to 400, power being reserved to the Council to select from the list of candidates persons, whose membership they may consider to be advantageous to the interests of the Club, to be additional Members,

PRESIDENT AND VICE-PRESIDENTS.

1

3.—The President shall take the chair at all Meetings, and have an original and a casting vote on all questions before the Meeting. In addition to the two *ex officio* Vice-Presidents, at least three others shall be nominated by the President, or, in his absence, by the Chairman, and elected at the Annual Meeting.

HON. SECRETARY.

4.—The Secretary shall perform all the usual secretarial work; cause a programme of each Meeting to be sent to every Member seven days at least before such Meeting; make all preparations for carrying out Meetings and, with or without the help of a paid Assistant Secretary or others, conduct all Field Meetings. On any questions arising between the Secretary (or Acting Secretary) and a Member at a Field Meeting, the decision of the Secretary shall be final.

The Secretary shall receive from each Member his or her share of the day's expenses, and thereout defray all incidental costs and charges of the Meeting, rendering an account of the same before the Annual Meeting to the Treasurer; any surplus of such collection shall form part of the General Fund, and any deficit be defrayed out of that Fund.

HON. TREASURER.

5.—The Treasurer shall keep an account of Subscriptions and all other moneys of the Club received and of all Disbursements, rendering at the Annual General Meeting a balance sheet of the same, as well as a general statement of the Club's finances. He shall send copies of the Annual Volume of Proceedings for each year to Ordinary Members who have paid their subscriptions for that year (as nearly as may be possible, in the order of such payment), to Honorary Members, and to such Societies and individuals as the Club may, from time to time, appoint to receive them. He shall also furnish a list at each Annual Meeting, containing the names of all Members in arrears, with the amount of their indebtedness to the Club. He shall also give notice of their election to all New Members.

ORDINARY MEMBERS.

- 6.—Ordinary Members are entitled to be present and take part in the Club's proceedings at all Meetings, and to receive the published "Proceedings" of the Club, when issued, for the year for which their subscription has been paid.
- 7.—Every candidate for admission shall be nominated in writing by one Member and seconded by another, to both of whom he must be personally known. He may be proposed at any Meeting, and his name shall appear in the programme of the first following Meeting at which a Ballot is held when he shall be elected by Ballot, one black ball in six to exclude.

Twelve Members shall form a quorum for the purpose of election. A Ballot shall be held at the Annual and Winter Meetings, and may be held at any other Meeting, should the Executive so decide, notice being given in the programme. In the event of the number of vacancies being less than the number of candidates at four successive Meetings, the names of any candidates proposed at the first of such Meetings who have not been elected at one of them shall be withdrawn, and shall not be eligible to be again proposed for election for at least a year after such withdrawal. Provided that if at any Meeting there shall be no vacancies available, it shall not be counted in estimating the above named four Meetings.

- 8.—The Annual Subscription shall be 10s., which shall become due and payable in advance on the 1st of January in each year. Subscriptions paid on election after September in each year shall be considered as subscriptions for the following year, unless otherwise agreed upon by such Member and the Treasurer. Every Member shall pay immediately after his election the sum of ten shillings as Entrance Fee, in addition to his first Annual Subscription.
- 9.—No person elected a Member shall be entitled to exercise any privilege as such until he has paid his Entrance Fee and first Subscription, and no Member shall be entitled to receive a copy of the "Proceedings" for any year until his Subscription for that year has been paid.
- 10.—A registered letter shall be sent by the Hon. Treasurer to any Member whose Subscription is in arrear at the date of any Annual Meeting, demanding payment within 28 days, failing which he shall cease to be a Member of the Club, but shall, nevertheless, be liable for the arrears then due.
- 11.—Members desiring to leave the Club shall give notice of the same in writing to the Treasurer (or Secretary), but, unless such notice is given before the end of January in any year, they shall be liable to pay the Annual Subscription due to the Club on and after January 1st in that year.

HONORARY MEMBERS.

12.—Honorary Members shall consist of persons eminent for scientific or natural history attainments, and shall be elected by the Council. They pay no subscription, and have all the privileges of Ordinary Members, except voting.

MEETINGS.

13.—The Annual General Meeting shall be held as near the first week in May as may be convenient; to receive the outgoing President's Address (if any) and the Treasurer's financial report; to elect the Officers and Editor for the ensuing year; to determine the number (which shall usually be three or four), dates, and places of Field Meetings during the ensuing summer, and for general purposes.

14.—Two Winter Meetings shall usually be held in or about the months of December or February for the exhibition of Objects of Interest (to which not more than one hour of the time before the reading of the Papers shall be devoted), for the reading and discussion of Papers, and for general purposes.

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The Dates and Places of the Winter and Annual Meetings shall be decided by the Executive.

15.—A Member may bring Friends to the Meetings subject to the following restrictions:—No person (except the husband, wife or 'child of a Member), may attend the Meeting unaccompanied by the Member introducing him, unless such Member be prevented attending from illness, and no Member may take with him to a *Field Meeting* more than one Friend, whose name and address must be submitted to the Hon. Secretary and approved by him or the Executive.

The above restrictions do not apply to the Executive or to the Acting Secretary at the Meeting.

16.—Members must give due notice (with prepayment of expenses) to the Hon. Secretary of their intention to be present, with or without a Friend, at any Field Meeting, in return for which the Secretary shall send to the Member a card for admission to the Meeting, to be produced when required. Any Member who, having given such notice, fails to attend, will be liable only for any expenses actually incurred on his account, and any balance will be returned to him on application. The sum of 1s., or such other amount as the Hon. Secretary may consider necessary, shall be charged to each person attending a Field Meeting, for Incidental Expenses.

17.—The Executive may at any time call a Special General Meeting of the Members upon their initative or upon a written requisition (signed by Eight Members) being sent to the Honorary Secretary. Any proposition to be submitted shall be stated in the Notice, which shall be sent to each Member of the Club not later than seven days before the Meeting.

PAPERS.

18.—Notice shall be given to the Secretary, a convenient time before each Meeting, of any motion to be made or any Paper or communication desired to be read, with its title and a short sketch of its scope or contents. The insertion of these in the Programme is subject to the consent of the Executive.

19.—The Publications of the Club shall be in the hands of the Executive, who shall appoint annually Three or more Ordinary Members to form with them and the Editor a Publication Committee for the purpose of deciding upon the contents of the Annual Volume. These contents shall consist of original papers and communications written for the Club, and either read, or accepted as read, at a General Meeting; also of the

Secretary's Reports of Meetings, the Treasurer's Financial Statement and Balance Sheet, a list to date of all Members of the Club, and of those elected in the current or previous year, with the names of their proposers and seconders. The Annual Volume shall be edited by the Editor subject to the direction of the Publication Committee.

20.—Twenty-five copies of his paper shall be presented to each author whose communication shall appear in the volume as a separate article, on notice being given by him to the Publisher to that effect.

THE AFFILIATION OF SOCIETIES AND LIBRARIES TO THE CLUB.

21.—Any Natural History or Antiquarian Society in the County may be affiliated to the Dorset Field Club on payment of an annual fee of Ten Shillings, in return for which the annual volume of the Proceedings of the Field Club shall be sent to such Society.

Every affiliated Society shall send the programme of its Meetings to the Hon. Secretary of the Field Club, and shall also report any discoveries of exceptional interest. And the Field Club shall send its programme to the Hon. Secretary of each affiliated Society.

The Members of the Field Club shall not be eligible, *ipso facto*, to attend any Meetings of affiliated Societies. and the Members of any affiliated Society shall not be eligible, *ipso facto*, to attend any Meetings of the Field Club. But any Member of an affiliated Society shall be eligible to read a paper or make an exhibit at the Winter Meetings of the Field Club at Dorchester.

Any Public Library or Club, or School or College Library, in England or elsewhere, may be affiliated to the Dorset Field Club on payment of an annual fee of Ten Shillings, in return for which the annual volume of the Proceedings of the Field Club shall be sent to such Library.

SECTIONAL COMMITTEES.

22.—Small Committees may be appointed at the Annual General Meeting to report to the Club any interesting facts or discoveries relating to the various sections which they represent; and the Committee of each section may elect one of their Members as a Corresponding Secretary.

NEW RULES.

23.—No alteration in or addition to these Rules shall be made except with the consent of a majority of three-fourths of the Members present at the Annual General Meeting, full notice of the proprosed alteration or addition having been given both in the current Programme and in that of the previous Meeting.

The Dorset

Hatural History and Antiquarian Field Club.

INAUGURATED MARCH 26th, 1875.

President: NELSON M. RICHARDSON Eso., B.A.

Vice-Presidents:

Vice-Presidents:

CHAS, J. CORNISH-BROWNE, ESQ., J.P. (Hon. Secretary).
CAPTAIN JOHN E. ACLAND, M.A., F.S.A. (Hon. Treasurer).
CAPTAIN G. R. ELWES, J.P.
THE REV. CANON J. M. J. FLETCHER, M.A. (Hon. Editor).
THE REV. CANON J. C. M. MANSEL-PLEYDELL, M.A.
THE REV. CANON MAYO, M.A., D. Litt., F.R. Hist. S. (Dorset Editor of "Somerset and Dorset Notes and Queries").
THE EARL OF MORAY, M.A., F.S.A. Scot., F.G.S.
SIR DANIEL MORRIS, K.C.M.G., D.Sc., D.C.L., F.L.S.
VERE L. OLIVER, ESQ., F.S.A.
THE REV. HERRERT PENTIN, M.A.
ALFRED POPE, ESQ., F.S.A.
W. de C. PRIDEAUX, ESQ., F.S.A., F.R.S.M.
E. R. SYKES, ESQ., B.A., F.Z.S. (Past Pres. Malacological Society).
HENRY SYMONDS, ESQ., F.S.A.
HIS HONOUR J. S. UDAL, F.S.A.

Executive Body:

NELSON M. RICHARDSON, ESQ., B.A. (President)
C. J. CORNISH-BROWNE, J.P., (Hon, Secretary), Coryton Park, Axminster.
CAPTAIN JOHN E. ACLAND, M.A., F.S.A. (Hon. Treasurer) Dorset County Museum, Dorchester.

Hon. Editor:

THE REV. CANON J. M. J. FLETCHER, M.A., 21, The Close, Salisbury.

Publication Committee :

THE EXECUTIVE, THE HON. EDITOR, and E. R. SYKES, Esq.

Sectional Committees: Dorset Photographic Survey-

THE MEMBERS of the EXECUTIVE Body ex officio C. J. CORNISH BROWNE, ESQ. (Hon. Director)
The Rev. S. E. V. FILLEUL, M.A.
Dr. E. K. LE FLEMING

1

C. H. MATE, ESQ. A. D. MOULLIN, ESQ. The Rev. J. RIDLEY EDWIN SEWARD, Esq., F.R.I.B.A.

Earthworks-

Captain J. E. Acland (Chairman) Chas. S. Prideaux, Esq. (Corresponding Secretary) THE PRESIDENT
F. E. ABBOTT, ESQ.
Lieut. J. G. N. CLIFT, R.E.
Lieut.-Colonel F. G. L. MAINWARING P. H. MORTON, ESQ. VERE L. OLIVER, ESQ., F.S.A. ALFRED POPE, ESQ., F.S.A. W. DE C. PRIDEAUX, ESQ., F.S.A. The Rev. W. RHYDDERCH MISS E. E. WOODHOUSE

Numismatic-

H. SYMONDS, ESQ., F.S.A. (Corresponding Secretary)
Captain John E. ACLAND, F.S.A.
Captain G. R. ELWES Lieut.-Colonel F. G. L. MAINWARING The Rev. Canon J. C. M. MANSEL-PLEYDELL, M.A.
VERE L. OLIVER, ESQ., F.S.A.
W. DE C. PRIDEAUX, ESQ., F.S.A.
H. F. RAYMOND, ESQ.

Restored Churches-

The Rev. A. C. Almack, M.A. (Corresponding Secretary) J. Allner, Esq., A.R.I.B.A. H. W. CRICKMAY, ESQ.
The Rev. James Cross, M.A.
The Rev. Canon Fletcher, M.A. G. W. FLOYER, Esq., B.A.

The Rev. H. HAWKINS The Rev. H. HAWAINS

The Rev. Canon Mayo, M.A.
The Rev. G. C. NIVEN, B.D., F.R.G.S.
W. B. WILDMAN, ESQ., M.A.
The Rev. A. C. WOODHOUSE, M.A.
The Rev. H. M. WELLINGTON

List of Members

OF THE

Dorset Matural History and Antiquarian field Club

FOR THE YEAR 1922.

Honorary Members:

			_	
Ye.	a	r	of	

Election. (The initials "O.M." signify "Original Member."

- O.M. W. CARRUTHERS, Esq., Ph.D., F.R.S., F.G.S., F.L.S., British Museum (Nat. Hist.), South Kensington, London.
- 1889 A. M. Wallis, Esq., 29, Mallams, Portland.
- 1900 A. SMITH WOODWARD, Esq., LL.D., F.R.S., F.G.S., British Museum (Nat. Hist.), South Kensington, London.
- 1904 SIR WM. T. THISELTON-DYER, K.C.M.G., C.I.E., LL.D., Sc.D., Ph.D., F.R.S. (retired), The Ferns, Witcombe, Gloucester.
- 1904 SIR FREDERICK TREVES, Bart., G.C.V.O., C.B., LL.D., 16, Riding House Street, Portland Place, London, W.1.
- 1908 THOMAS HARDY, Esq., O.M., D. Litt., LL.D., Max Gate, Dorchester,

Members:

- 1903 The Most Hon. the Marquis of Salisbury, M.A., C.B.
- 1903 The Most Hon. the Marchioness of Salisbury
- o.m. The Right Hon. the Earl of Moray, M.A., F.S.A. Scot., F.G.S. (Vice-President)
- 1919 The Right Hon, the Earl of Eldon
- The Manor House, Cranborne
- The Manor House, Cranborne
- Kinfauns Castle, Perth, N.B.
- Encombe, Corfe Castle

1911	The Right Hon. the Earl of	
	Ilchester .	Melbury, Dorchester
1902	The Right Hon. the Earl of Shaftesbury, K.P., K.C.V.O.	St. Giles, Wimborne
1922	The Right Rev. the Lord	
	Bishop of Salisbury, D.D.,	
	D.C.L.	The Close, Salisbury
1922	The Hon. Lady Cecil, C.B.E.	Lytchett Heath, Poole
1907	The Right Hon. Lord Wynford	Wynford House, Maiden Newton, Dorchester
1907	The Right Hon. Lady Wynford	Wynford House, Maiden Newton, Dorchester
1910	Abbott, F. E., Esq.	Shortwood, Christchurch, Hants
1893	Acland, Captain John E., M.A.,	onorthood, onrictenaron, mante
20,0	F.S.A. (Vice-President and	
	Hon. Treasurer)	Wollaston House, Dorchester
1892	Acton, Rev. Edward, M.A.	Wolverton Rectory, Basingstoke
1921	Aldous, Rev. F. W.	The Rectory, Shaftesbury
1907	Allner, Mrs. George	National Provincial Bank, Stur- minster Newton
1921	Allner James, Esq.	91, High Steet, Poole
1908	Almack, Rev. A. C., M.A.	The Rectory, Blandford St. Mary
1920	Aston, Captain Harold	Preston House, Iwerne Minster, Blandford
1920	Aston, Mrs. Harold	Preston House, Iwerne Minster
1907	Atkinson, George T., Esq., M.A.	Durlston Court, Swanage
1920	Atkinson, E. H. Tindal, Esq.	4, Essex Court, Temple, E.C.
1921	Atkinson, Mrs.	Elm House, Rodwell, Weymouth
1912	Baker, Rev. E. W., B.A.	The Rectory, Witchampton
1919	Ball, Rev. H., B.A.	Tremel, Ferndown, Wimborne
1919	Ball, Miss Evelyn	Tremel, Ferndown, Wimborne
1906	Bankes, Mrs.	Kingston Lacy, Wimborne
1912	Bankes, Jerome N., Esq.,	
	F.S.A.	63, Redclffe Gardens, London, S.W.
1902	Barkworth, Edmund, Esq.	Hillymead, Seaton
1904	Barlow, Major C. M.	Southcot, Charminster
1921	Barnes, Mrs.	Victoria, Mount Pleasant, Weymouth
1906	Barrow, Richard, Esq.	5, Claremont Terrace, Exmouth
1919	Barrow, Colonel, H. J. W.,	2 337 4 1 11 337
400#	R.A.M.C.	3, Westerhall, Weymouth
1895	Bartelot, Rev. R. Grosvenor,	Fordington St. George Vicarage,
1004	M.A.	Dorchester Totall House Leigh Sherborne
1904	Baskett, Mrs. S. Russell	Totnell House, Leigh, Sherborne
1913	Bassett, Rev. H. H. Tilney,	
	R.D. (Hon. Editor of the Dorset Rainfall Reports)	Whitchurch Vicarage, Blandford
	Dorset Raingan Reports	William Vicarage, Dianuiolu

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XIV.		
1917	Beament, W. O., Esq., M.A.	Beaminster
1888	Beckford, F. J., Esq.	Witley, Parkstone
1908	Benett-Stanford, Major J.,	Wittey, Tarkstone
1900	F.R.G.S., F.Z.S.	Hatch House, Tisbury, Wilts
1920	Billington, Miss F. A.	Wyke End, Bincleaves, Weymouth
1910	Blackett, Rev. J. C., B.A.	Compton Rectory, Winchester
1917	Blathwayt, Rev. F. L., M,A.,	Compton Rectory, whichester
1917	M.B.O.U, (Hon. Editor of the	
	Dorset Phenological Report)	Melbury Osmond Rectory, Dor- chester
1919	Blomefield, Mrs.	Meadowside, Sherborne
1903	Bond, Gerald Denis, Esq	Holme, Wareham
1903	Bond, Wm. Ralph G., Esq.	Tyneham, Wareham
1913	Bone, Clement G. Esq., M.A.	6, Lennox Street, Weymouth
1889	Bower, H. Syndercombe, Esq.	Fontmell Parva, Shillingstone,
1009	Bower, 11. Syndercombe, Esq.	Blandford
1900	Bower, Rev. Charles H.S., M.A.	Childe Okeford Rectory, Shilling-
1021	Duralland Linds Call Calandan	stone, Dorset
1921	Bradley, LieutCol. Sylvester, R.A.M.C.	12, Greenhill Terrace, Weymouth
1922	Bragge, Miss	Somerset House, Weymouth
1898	Brandreth, Rev, F. W., M.A.	Buckland Newton, Dorchester
1921	Brown Basil, Rev. H.	Affpuddle Vicarage, Dorchester
1907	Bulfin, Ignatius, Esq., B.A.	The Den, Knole Road, Bourne- mouth
1900	Bullen, Colonel John Bullen	
	Symes	Catherston Leweston, near Char- mouth
1021	Dungan C. D. Fan	
1921	Burgess, G. B., Esq.	Withleigh, Spa-road, Radipole, Weymouth
1907	Bury, Mrs. Henry	The Gate House, Alumdale Road,
1907	Bury, mrs. Henry	Bournemouth West
1905	Busk, W. G., Esq.	Wraxall Manor, Cattistock, Dor-
1,05	Buon, VV. G., Bod.	chester
1905	Busk, Mrs. W. G.	Wraxall Manor, Cattistock, Dor-
1903	Busk, Mrs. W. G.	chester
1903	Butler-Bowden, Mrs. Bruno	Upwey House, Upwey
1911	Butlin, M. C., Esq., M.A.	7, Westerhall Road, Weymouth
1921	Cameron, Miss Violet	Sherborne House, Sherborne
1919	Carroll, Mrs.	The Warren, Glendinning Avenue,
		Weymouth
1920	Carroll, LtCol. E. R. W.	Glendinning Avenue, Weymouth
1891	Carter, William, Esq.	The Oaks, Parkstone
1919	Castleman Smith, Miss E.	The Close, Blandford
1913	Champ, Miss Edith	St. Katherine's, Bridport
1897	Chudleigh, Mrs,	The Castle, Dudsbury, Longham,
		Dorset
1918	Chudleigh, Captain C. A. E.	West India Regiment, Kingston,
		Jamaica

Church, Colonel Arthur St. Alban's, Rodwell, Weymouth 1894 St. Aldhelm's, Wareham Clark, Mrs. E. S. 1905 The Ship Hotel, Crediton, Devon Clarke, R. Stanley, Esq. 1895 Athelhampton Hall, Dorchester Cochrane, G., Esq. 1920 Mappowder Rectory, Sturminster 1922 Coleman, Rev. G. A. Newton Westmead, Bridport 1883 Colfox, Miss A. L. Coneygar, Bridport Colfox, Colonel T. A., T.D. 1878 Stoborough Croft, Wareham 1904 Collins, Wm. W., Esq., R.I. Vellore, Overcliff Drive West, 1920 Collins, W. F., Esq. Bournemouth Hope Bank, Grosvenor 1921 Colson, Mrs. Road. Weymouth 1912 Cooke, Rev. J. H., M.A., Shillingstone Rectory LL.D. 1903 Cornish-Browne, C. J., Esq. (Vice-President and Hon. Coryton Park, Axminster Secretary) Coryton Park, Axminster 1922 Cornish-Browne, Mrs. C. J. Coombe Wood, Branksome Park Corrie, E. Rowland, Esq. 1917 1920 Cosens, Mrs. W. B. The Gables, Dorchester West Hill House, Wyke Regis, 1921 Crawford, Miss Weymouth 1921 Crichton, Mrs. Hew Osmington House, Weymouth 49, St. Mary Street, Weymouth 1909 Crickmay, Harry W., Esq. Cross, Rev. James, M.A. Baillie House, Sturminster Marshall, 1884 Wimborne 1914 Cross, Miss Florence Lydlinch, Sturminster Newton 1885 Curme, Decimus, Esq., 1, Nelson Road, Bournemouth M.R.C.S. Blandford 1896 Curtis, C. H., Esq, Curtis, Wilfred Parkinson, 1897 Esq., F.E.S. Drake North, Sandringham Road, Parkstone 27. Holdenhurst Road, Bourne-1903 Dacombe, J. M. J., Esq. mouth 1918 27. Holdenhurst Road, Bourne-Dacombe, Miss, M.A. mouth 1914 Dalton, Mrs. E. E. Cerne Abbas, Dorchester Brentry, Blandford 1907 Daniell, G. H. S., Esq., M.B. Davis, Geo., Esq. West Lodge, Icen Way, Dorchester 1894 1904 Deane, Mrs. A. M. Badbury, 3, Park Road, Bournemouth De la Bere, H. D, Esq., C.B. 1921 Melbury Bubb, Dorchester 1910 Devenish, Major J. H. C. Springfield, Weymouth Dicker, Miss Eleanor H. Great Toller, Dorset 1907 1919 Dicker, C. G. Hamilton, Esq. Keble College, Oxford Dickson, Colonel W. D. Southill, Dean Park, Bournemouth 1912 1912 Dickson, Mrs. W. D. Southill, Dean Park, Bournemouth

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1921	Digby, Major F. J. B. Wingfield	
1601	D.S.O.	Sherborne Castle
1921	Digby, Rev. Canon Wingfield, M.A.	The Vicarage, Sherborne
1911	Dillon-Trenchard Miss	
	Margaret	The Ridge, Durlston Park Road, Swanage
1908	Dominy, G. H., Esq., M.R.C.S.,	
	L.R.C.P.	Burbage, Marlborough
1919	Dominy, H., Esq.	The Homestead, Cerne Abbas
1922	Donne, The Rev. C. E.	Compton Abbas Rectory, Shaftesbur
1922	Donne, Mrs. C. E.	Compton Abbas Rectory, Shaftesbury
1912	Dru Drury, G. Esq., M.R.C.S.,	
	L.R.C.P.	Corfe Castle, Wareham
1921	Drummond, Mrs.	Trent Manor, Sherborne
1905	Duke, Mrs. Henry	Manor House, Godmanstone, Dor- chester
1907	Duke, Miss M. Constance	The Limes, Dorchester
1908	Duke, Mrs. E. Barnaby	Maen, Dorchester
1910	Eaton, Rev. A. E., M.A., F.E.S.	Richmond Villa, Northam, North Devon
1916	Edwards, Rev. R. D. St. G., M.A.	Longbredy Rectory, Dorchester
1913	Ellis, Henry, Esq., F.R.A.S.	Boat Close, Lyme Regis
1885	Elwes, Captain G. R. (Vice-	
1021	President)	3, Jarborough Road, Southsea
1921	Elwes, Colonel L. C.	Burnt Hill, Broadstone
1921	Elwes, Mrs. L. C.	Burnt Hill, Broadstone
1922	Elworthy, Mrs. Wm.	Monkton, Dorchester
1922	Ewart, W. H. Lee, Esq.	Holworth House, Broadmayne, Dorchester
1922	Ewart, Mrs. W. H. Lee	Holworth House, Broadmayne, Dorchester
1913	Facey, C. S., Esq., M.B.	The Elms, Chickerell, near Wey- mouth
1886	Falkner, C. G., Esq., M.A.	Ireton Bank, Rusholme, Manchester
1912	Ferguson, Miss Constance	13, Royal Terrace, Weymouth
1904	Ffooks, Mrs. E. Archdall	Kingscote, Dorchester
1904	Fielding, Thos., Esq., M.D.	Genesta, West Hill Road, Bourne- mouth
1892	Filleul, Rev. S. E. V., M A.	Sandford House, Wareham
1910	Filliter, Mrs. W. D.	Arishmel, Parkstone, Dorset
1911	Fisher, Rev. J. Martyn, M.A., R.D.	St. Paul's Vicarage, Weymouth
1907	Fletcher, Rev. Canon J. M. J., M.A., (Hon. Editor and Vice-	
1800	President)	21, The Close, Salisbury
1890	Fletcher, W. H. B., Esq.	Aldwick Manor, Bognor, Sussex

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1885	Floyer, G. W., Esq., B.A.	Wes
	73 1 N.F.	Culs

1885	Floyer, G. W., Esq., B.	١.
1895	Forbes, Mrs	

1897 Forde, Henry, Esq.

Forder, B. C., Esq. 1910

Forder, Mrs. B. C. 1921

Forrester, Mrs. James 1893 1921 Foster, J. J., Esq., F.S.A.

Freame, Major B. E. 1910

1921 French, Mrs. Harvey

Fry. Edward Alexander, Esq. 1895

Fry, George, S., Esq., C.B.E. 1903

1921 Fudge, Mrs. J. Whittle

George, Mrs. 1896

Gerard-Pearse, J. Esq., F.R.C.S. 1921

1921 Gerard-Pearse, Mrs.

1921 Girling, Dr. C. J., M.B.

1890 Glyn, Captain Carr Stuart

Gordon, Frank, Esq. 1920

1906 Gowring, Mrs. B. W.

1920 Grazebrook, Lieut.-Col. G. C., C.M.G., D.S.O.

1888 Greves, Hyla, Esq., M.D.

1921 Grimley, A. F., Esq.

1920 Grimsdell, H. J., Esq.

Groves, Major Herbert J. 1904

1906 Groves, Miss S. J.

1912 Groves, Miss

1906 Gundry, Joseph, Esq.

Haines, F. H., Esq., M.R.C.S., 1912 L.R.C.P.

1920 Haines, C. E., Esq.

1920 Haines, Mrs.

1903 Hambro, Sir Everard, K.C.V.O.

1913 Hamilton, Miss

1921 Hastings, Mrs. J.

1903 Hawkins, Miss Isabel

1908 Hawkins, Rev. H.

1920 Haydon, Clement J., Esq.

1893 Hayne, R. Esq.

1911 Hellins, Rev. Canon, M.A., LL.B.

1911 Hellins, Mrs. st Stafford, Dorchester

Culverhayes, Shillingstone, Blandford

Luscombe, Parkstone

Culverhaves, Shillingstone, Dorset Culverhayes, Shillingstone, Dorset

Westport, Wareham

Aldwick, Holland Road, Sutton, Surrey

The Chantry, Gilllingham

Manor Farm, St. James', Shaftesbury

Sunnyside, Bulstrode Way, Gerrard's Cross, Bucks.

15, Walsingham Road, Hove

Glen View, Dorchester

Fleet House, near Weymouth

11, Royal Terrace, Weymouth

11, Royal Terrace, Weymouth

Cranborne

Woodleaze, Wimborne

5, Lansdowne, Weymouth

49, High West Street, Dorchester

The Verne Citadel, Portland

Rodney House, Bournemouth

St. Crispin's, Sherborne

16, Brunswick Terrace, Weymouth

Clifton, Weymouth

Thickthorne, Broadwey, Dorset

Blackdown, Weymouth

Red House, Queen's Avenue, Dorchester

Brookside, Winfrith, Dorchester

Cranham, Glendinning Avenue. Weymouth

Cranham, Glendinning Avenue. Weymouth

Milton Abbey, Dorset

Affpuddle Vicarage, Dorchester

Wincombe Park, Shaftesbury

Ryme, Elwell Street, Upwey

1, Westerhall, Weymouth

Ben Vuela, West Cliff Road. Bournemouth

Spring Bottom, Osmington

Marnhull Rectory, Dorset Marnhull Rectory, Dorset

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XVIII.		
1899	Henning, Mrs.	Frome House, Dorchester
1916	Hewgill, Chas. W. Esq.	Compton Lodge, Weymouth
1912	Hichens, Mrs. T. S.	Flamberts, Trent, Sherborne
1910	Hill, Miss Pearson	Rax, Bridport
1902	Hine, R. Esq.	Beaminster
1902	Homer, Miss E. C. Wood	Bardolf Manor, Puddletown
1917	Homer, Mrs. G. Wood	Bardolf Manor, Puddletown
1921	Hyde, Edward, Esq.	Lloyds Bank, Wimborne
1903	Jenkins, Rev. T. Leonard, M.A.	Leigh Vicarage, Sherborne
1912	Jordan, Miss	The Ridge, Durlston Park Road, Swanage
1915	Kentish, G. C. A., Esq.	Longcroft, Windsor Road, Parkstone
1920	Knight, Alexander, Esq.	Long Lynch, Childe Okeford, Shillingstone
1920	Knight, Mrs.	Long Lynch, Childe Okeford, Shillingstone
1895	Lafontaine, A. C. de Esq., F.S.A.	21 Vale Avenue, Chelsea, S.W. 3.
_1876	Langford, Rev. Canon, M.A.	Southbrook, Starcross, S. Devon
1919	Le Breton, Captain J. G.	Loders Court, Bridport
1907	Lees, Rear-Admiral Edgar,	· · · · · · · · · · · · · · · · · · ·
	R.N.	Springfield, Cann, Shaftesbury
1907	Lees, Mrs. Edgar	Springfield, Cann. Shaftesbury
1910	Le Fleming, E. K., Esq., B.A., M.B.	St. Margaret's Wimborne
1900	Legge, Miss Jane	Allington Villa, Bridport
1902	Lewis, Rev. A., M.A.	Highfield, Portishead
1890	Lister, Miss Gulielma, F.L.S.	High Cliff, Lyme Regis
1921	Lithgow, Major H. L.	Walton Lodge, Rodwell, Weymouth
1905	Llewellin, W., Esq., M.A.	Upton House, Poole
1892	Lock, His Honour Judge B. Fossett	The Toft, Bridlington, East Yorks
1922	Logan, Mrs. R. A.	27, St. Helen's Road, Dorchester
1911	Long, Rev. H. R., B.A.	Tolpuddle, Dorchester
1888	MacDonald, P. W., Esq., M.D.	Grasmere, Spa Road, Weymouth
1902	Mainwaring, LieutCol. F. G. L.	Wabey House, Upwey
1920	Manning, H. C., Esq., M.R.C.S., L.R.C.P.	1, Royal Cresent, Weymouth
1890	Mansel-Pleydell, Rev. Canon J. C. M., M.A., (Vice-President)	19, Moore Street, Cadogan Square, London, S.W. 3.
1883	Marriott, Sir W. Smith, Bart.	The Down House, Blandford
1920	Marshall, Major E. T.	Notley Farm, Owermoigne, Dor- chester
1918	Marston, Miss	Corfe Castle
1907	Mate, C. H., Esq.	Elim, Surrey Road South, Bourne- mouth

West Parley Rectory, Wimborne 1920 Maturin, Rev. M. Persse, M.A. O.M. Mayo, Rev. Canon, M.A., D.Litt., F.R. Hist. S. (Vice-President) Gillingham, Dorset Old Castle Cottage, Weymouth 1922 Meek, Mrs. Hownam The Vicarage, Yetminster 1905 Morgan, Mrs. 1911 Morris, Sir Daniel K.C.M.G., D.Sc., D.C.L., F.L.S., (Vice-14, Crabton Close, Boscombe President) High West Street, Dorchester Morton, P. H., Esq. 1920 1914 Moule, Rev. A. C., B.A. Trumpington Vicarage, Cambridge Fermain, Rempstone Road, Swanage 1897 Moullin, Arthur D., Esq., 3, Dunmarklyn Mansions, 1919 Murdoch, Mrs. Weymouth Nash, Miss 12, Waterloo Place, Weymouth 1921 12, Waterloo Place, Weymouth 1921 Nash, Miss Helen 1919 Steepleton Rectory, Dorchester. Negus, Rev. A, E., M.A. 1921 Newbery, F. H., Esq., (Knight Officer of the Crown of Italy), (Cavaliere Officiale) Eastgate, Corfe Castle 1905 Nettlecombe, Melplash Nicholson, Captain Hugh 1920 Niven, Rev. G.C., B.D., F.R.G.S. St. Peter's Rectory, Dorchester 1921 Nix, Miss M. M. 11, Alexandra Road, Weymouth 1906 Oke, A. W., Esq., B.A., LL.M. F.S.A., F.G.S. 32, Denmark Villas, Hove, Sussex 1886 Okeden, Colonel U. E. Parry Turnworth, Blandford 1908 Oliver, Vere L., Esq., F.S.A. (Vice-President) Greenhill House, Weymouth Oliver, Mrs. Vere L. Greenhill House, Weymouth 1908 1904 Castle House, Weymouth Oliver, Weston, Esq., M.A. 1908 Ord, W. T., Esq., M.R.C.S., L.R.C.P., F.G.S. 18, Littledown Road, Bournemouth 19.11 Ouless, W. W., Esq., R.A. 12, Bryanston Square, London, W. Ouless, Miss Catherine 12, Bryanston Square, London, W. 1911 1919 Paine, Mrs. The Warren, Uplyme, Lyme Regis Paine, Miss Ruth The Warren, Uplyme, Lyme Regis 1919 1921 Palmer, Colonel H. I. E. The Merse, Grosvenor Road, Weymouth 1921 Palmer, Mrs. The Merse, Grosvenor Road, Weymouth 1914 Pass, Alfred Douglas, Esq. Wootton Fitzpaine, Charmouth 1890 Patey, Miss 185, Oakwood Court, Kensington London, W. 1922 Patison, Miss Marion Osmington Cottage. Osmington. Weymouth 1908 Patterson, Mrs. Myles Conygar, Broadmayne, Dorchester 1919 Patterson, Myles, Esq., B.A. Conygar, Broadmayne, Dorchester 1907 Paul, Edward Clifford, Esq.,

Eastbrook House, Upwey

M.A.

1894	Payne, Miss Florence O.	Rydal, Wimborne
1918	Peachell, G. E., Esq., M.D.	Herrison, Dorchester
1906	Pearce, Mrs. Thos. A.	27, Icen Way, Dorchester
1909	Pearce, Edwin, Esq.	Fore Street, Taunton
1921	Pearce, E. J. Esq.	K 4, New Court, Sidney Sussex
	, , ,	College, Cambridge
1894	Penny-Snook, S., Esq., M.R.C.S.,	
	L.R.C.P.	Netherton House, Weymouth
1907	Penny-Snook, Mrs. S,	Netherton House, Weymouth
1901	Pentin, Rev. Herbert, M.A.	CLD LLTT - DILLT
1020	(Vice-President)	St. Peter's Vicarage, Portland
1920	Peter, Mrs.	Westdown, Weymouth
1894	Peto, Sir Henry, Bart.	Chedington Court, Misterton, Somerset
1908	Phillips, Rev. C. A., M:A,	Walton House, Bournemouth
1898	Pickard-Cambridge, A.W., Esq.,	,
	M.A.	St. Catherine's, Headington Hill, Oxford
1908	Pike, Leonard G., Esq.	Kingbarrow, Wareham
1920	Pim, W. Malcolm, Esq.	Woodstock, Dorchester Road, Wey- mouth
1920	Pim, Mrs. W. Malcolm	Woodstock, Dorchester Road, Wey- mouth
1908	Pitt-Rivers, A. L. Fox, Esq., F.S.A.	Rushmore, Salisbury
1904	Plowman, Rev. L. S.,	Ibberton Rectory, Blandford
1896	Pond, S., Esq.,	Blandford
1894	Ponting, Chas. E., Esq., F.S.A.,	Lockeridge, Parkstone,
O.M.	Pope, Alfred, Esq., F.S.A. (Vice-	3 /
	President).	South Court, Dorchester
1906	Pope, Major Alfred Rolph, M.A.,	Culliford House, Dorchester
1906	Pope, Mrs. Alfred Rolph	Culliford House, Dorchester
1914	Powell, H. Bolland, Esq.,	
	A.M.I.C.E.	Bowland, Westminster Road,
		Branksome Park, Bournemouth
1921	Powys, A. R., Esq., A.R.I.B.A.	13, Hammersmith Terrace, London, W.
1920	Prideaux, A. E. D., Esq., L.D.S.	Wadham House, Dorchester
1896	Prideaux, C. S., Esq., L.D.S., F.R.S.M., F.R.A.I.	Ermington, Dorchester
1900	Prideaux, W. de C., Esq., L.D.S.,	Elimington, Dorchester
	F S.A., F.R.S.M.(Vice-	
1005	President)	12, Frederick Place, Weymouth
1905	Pringle, Henry T., Esq., M.D.	Ferndown, Dorset
1905	Pringle, Mrs. Henry T.	Ferndown, Dorset
1921	Pugh, Rev. C. S.	Buckland Ripers Rectory, Dorchester
1888	Pye, William, Esq.	Dunmore, Rodwell, Weymouth
1921	Quick, R., Esq., F.S.A.	Sec., Russell-Cotes Museum, Bourne- mouth

1905	Ramsden, Mrs.	Meerhay, Beaminster, Dorset
1912	Rawlence, E. A., Esq., F.S.A.	S. Andrew's, Churchfields, Salisbury
1921	Rawlence, Major A. R.	Dyrham, Sherborne
1919	Raymond, LtCol. M., R.G.A.	The Croft, Wimborne
1919	Raymond, Mrs.	The Croft, Wimborne
1921	Rees, Surgeon-Captain O.,	
	R.N. (ret.)	Abbotsbury, Dorchester
1886	Reynolds, Mrs. Arthur	Wyncroft, Bridport
1887	Richardson, N. M., Esq. B.A.	
	(President)	Montevideo, Chickerell, near
		Weymouth
1920	Ricardo, Miss K.	Berghmote, Wimborne
1901	Ridley, Rev. J.	Pulham Rectory, Dorchester
1911	Robson, Colonel H. D.	Oswald, Lulworth Cove
1911	Robson, Mrs. H. D.	Oswald, Lulworth Cove
1886	Rodd, Edward Stanhope, Esq.	Chardstock House, Chard
1907	Roe, Miss M. M. E.	Trent Rectory, Sherborne
1909	Roe, Rev. Prebendary Wilfred	
	T., M.A.	Trent Rectory, Sherborne
1907	Roper, Freeman, Esq., F.L.S.	Forde Abbey, Chard
1922	Saker, Miss Margaret M.	S. Aubyn's, Carlton Road North, Weymouth
1905	Sanderson-Wells, T. H., Esq.,	
	O.B.E., M.D., F.R.C.S.	16, Victoria Terrace, Weymouth
1905	Saunt, Miss	The Cottage, Upwey
1905	Saunt, Miss B.V.	The Cottage, Upwey
1910	Schuster, Mrs. W. P.	Broadstone House, Broadstone
1883	Searle, Alan, Esq.	Hawkmore, Paignton, S. Devon
1919	Seward, Edwin, Esq., F.R.I.B.A.	12, Victoria Terrace, Weymouth
1906	Shephard, Colonel C.S., D.S.O.	Shortlake, Osmington, Weymouth
1919	Sheridan, M. O., Esq.	Halsdon, Warmwell, Dorchester
1920	Sheridan, Mrs. M. O.	Halsdon, Warmwell, Dorchester
1884	Sherren, J. A., Esq, F.R.Hist.S.	Helmsley, Pen Hill Avenue, Parkstone
1914	Sherring, R. Vowell, Esq.,	TT 11 / T 12 / 1
1012	F.L.S.	Hallatrow, Bristol
1913	Shields, Rev. A. J., M.A.	Battleford, Axminster
1897	Simpson, Jas., Esq.	Brampton Kinlet, Canford Cliff , Bournemouth
1920	Smerdon, E. Wilmot, Esq., M.D., F.R.C.S.	38, Cornwall Road, Dorchester
1916	Smith, Rev. Edward, M.A., R.D.	Hazelbury Bryan Rectory, Blandford
1919	Smith, Frederick W., Esq.,	The Manor House, Poyntington,
	F.S.A.	Sherborne
1899	Smith, Howard Lyon, Esq., L.R.C.P.	Mount Pleasant, Inkbarrow, Worcestershire
1909	Smith, Nowell C., Esq., M.A.	The School House, Sherborne
1908	Smith, Mrs. Spencer	The Vine House, Sturminster Newton
1888	Solly, Rev. H Shaen, M.A.	5, Denewood Road, Bournemouth West

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1919	Sotheran, Miss Gertrude	The New House, Norden, Corfe Castle
1919	Stephens, Major J. A.	Hayden Lodge, Holywell, Dorchester
1921	Stephen, Major F. A., D,S.O.	Moorfields, Ferndown, Wimborne
1918	Stote, Rev. A. W., M.A.	Colehill Vicarage, Wimborne
1920	Stote, Mrs. A. W.	Colehill Vicarage, Wimborne
1920	Streatfeild, C., Esq., I.C.S.	Champions, Beaminster
1895	Sturdy, Leonard, Esq.	Trigon, Wareham
1907	Sturdy, Alan, Esq.,	Carey, Wareham
1905	Sturdy, E. T., Esq.	Norburton, Burton Bradstock,
	•	Bridport
1914	Sturrock, J., Esq., C.I.E.	12, Greenhill, Weymouth
1920	Sugden, E. Percy, Esq.	Uplands, Wimborn :
1920	Sugden, Mrs.	Uplands, Wimborne ,
1898	Suttill, H. S., Esq.	Pymore, Bridport
1905	Suttill, Mrs. John	24, West Street, Bridport
1903	Swaffield, A. Owen, Esq.	Rodwell Lodge, Weymouth
1922	Swann, Major F. Holland	Steeple, Corfe Castle
1912	Swinburne Hanham, J. C., Esq.	106, Goldhurst Terrace, N.W.
1893	Sykes, E. R., Esq., B.A., F.Z.S.	
	(Vice-President)	West Lodge, Iwerne Minster, Blandford
1889	Symes, Colonel G. P., M.A., B.C.L., M.V.O.	Monksdene, Dorchester Road, Weymouth
1904	Symonds, Arthur G., Esq.	10, South Street, Dorchester
1904	Symonds, Henry, Esq., F.S.A.	
	(Vice-President)	Staplegrove Elm, near Taunton
1912	Symonds, F. G., Esq.	The Firs, Sturminster Newton
1913	Symonds, Wm. Pope, Esq.	Newton House, Sturminster Newton
1921	Tanner, Rev, E. V., M.A., M.C.	The College House, Weymouth
1901	Telfordsmith, Telford, Esq.,	mi IZ- II De det
100/	M.A., M.D.	The Knoll, Parkstone
1906	Thomson, Chas. Bertram, Esq., F.R.C.S.	Romansleigh, Wimborne
1920	Thresher, Miss Maud	Corfe Hill, Weymouth
1898	Troyte-Bullock, Mrs.	Silton Lodge, Zeals, Bath
1922	Tunstall, W. C. B., Esq., B.A.	The College, Weymouth
1921	Tyrwhitt-Drake, Mrs.	Crundle Court, Milborne Port
O.M.	Udal, His Honour J. S., F.S.A.	Ordinale Court, Minosine 1 ort
О.м.	(Vice-President)	24, Neville Court, London, N.W. 8.
1908	Udal, N. R., Esq., B.A.	Gordon College, Khartoum
1890	Usherwood, Rev. Canon, M.A.	Bagdale, Parkstone
1919	Veitch, W. Hardie, Esq.	Lullingstone, Wimborne
1921	Vidler, Oscar C., Esq.	Widcombe, Dorchester
1910	Vivian, S. P., Esq.	22, Royal Avenue, Chelsea, S.W.
1887	Walker, Rev. S. A., M.A.	Charlton Manor, Blandford
1916	Ward, The Ven. Algernon, M.A.,	
	F.S.A., Scot.	Sturminster Newton Vicarage

	<i>I</i>	
1905	Ward, Samuel, Esq.	Ingleton, Greenhill, Weymouth
1904	Warry, Mrs. King	99, Gossom's End, Berkhamsted, Herts.
1904	Warry, Wm., Esq.	Westrow, Holwell, Sherborne
1917	Waterston, C., Esq.	Bucknowle House, Corfe Castle
1905	Watkins, Wm., Esq., F.R.G.S.	Ethelburga House, 91-93, Bishopsgate, London, E.C., 2.
1921	Wellington, Rev. H. M., M.A.	Athelhampton Rectory, Dorchester
1920	Wentworth-Forbes, Mrs.	10, Greenhill, Weymouth
1908	Whitby, Mrs. J.	Preston, Yeovil
1921	White, E. Barton, M.R.C.S., L.R.C.P., F.E.S.	Herrison, Dorchester
1914	Widnell, Edward, Esq., M.A.	Royston, Wimborne
1903	Williams, Captain Berkeley C. W.	Herringston, Dorchester
1884	Williams, Colonel Sir Robert, Bart., M.P.	Bridehead, Dorchester
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1906	Woodhouse, Mrs. Frank D.	Old Ford House, Blandford St. Mary
1920	Woodhouse, Major H. S.	Nordon, Blandford
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ELECTED FEBRUARY 21st, 1922	ELECTED	FEBRUARY	21sr.	1922
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Nominae	ELECTED MAY 2ND, 1922.	Segonder
Nominee.	ELECTED MAY 2ND, 1922. Proposer.	Seconder.
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Nominee. The Right Rev. The Lord Bishop of Salisbury, D.D., D.C.L., of The Close,	Proposer. The Rev. Canon J. M. J.	The Rev. Canon C. H.
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The Proceedings

OF THE

Dorset Matural History and Antiquarian field Club.

(From May, 1921, to May, 1922).

FIRST SUMMER MEETING

AT CORFE CASTLE.

28th July, 1921.

Our Club, the activities of which were naturally considerably hampered during the years that the Great War lasted, is gradually returning to its pre-war conditions. And although, during the past year, it has again been deemed advisable to omit from its programme anything in the nature of a "long excursion," such as would involve the necessity of arranging for hotel accommodation for a large party, yet three "one-day meetings" have been held in places of interest situated in various parts of our own county. And the large attendance of members present at each of these has shown very clearly how much these interesting and instructive gatherings are appreciated.

The first of these meetings was held on Thursday, July 28th, at Corfe Castle, when the party consisted of nearly 100 of the members of the club and their friends. The President, Mr. Nelson M. Richardson, was supported by two of the Vice-Presidents: the Hon. Secretary, Rev. Herbert Pentin, and Mr. Alfred Pope, F.S.A., with the Assistant Secretary, Mr. Harry Pouncy, who throughout the day acted as *cicerone*, and

to whose knowledge of and able dealing with his subject, those who were present were so much indebted. Amongst others who were members of the party were the Lord Bishop of Coventry (Dr. Yeatman Biggs, F.S.A.), Mr. R. Quick, F.S.A., Mr. W. W. Ouless, R.A., General Laurence Drummond, C.B., C.B.E., M.V.O., Colonel C. S. Shepherd, D.S.O., &c.

Although many of the members motored over, proceedings were somewhat delayed owing to the late arrival of the train, which was more than half-an-hour behind time. Consequently it was decided that the description of the Castle should be given while the members of the party were partaking of their luncheon. Accordingly, Mr. Pouncy led the party through the entrance gateway of the castle and the first ward to the inner fosse, where, as his hearers sat in the pleasant shade, he gave a most interesting descriptive sketch of the history of the Castle. He said that

Dorset folk were justly proud of Corfe Castle, because, like Maiden Castle and Maumbury Rings, it was the best thing of its kind in the whole country—that is, if they agreed with Mr. Thomas Bond, of Tyneham House, who made a lifelong study of the place, and who declared that "Corfe Castle stands pre-eminent among the castles of Great Britain as a grand and noble example of mediaeval military architecture." For a vivid impression of what the castle was like in its completeness and perfection, before the grievous devastation wrought in the Civil War in 1646, they were indebted to the lively pencil of Ralph Treswell, the active steward of Sir Christopher Hatton, who acquired the castle by purchase from Queen Elizabeth in the 14th year of her reign. Judging by the many valuable documentary records which he left behind, Treswell was something of an artist as well as a draughtsman and chartographer, and, in his drawing of the castle as it stood in 1586, with the flag flying bravely above the great keep, not only the King's Tower and the Queen's Tower crowning the eminence, but also the whole enceinte of mural towers and curtain walls. were completed with a battlemented parapet, under the shelter of which the warders could pace their rounds along the chemin de ronde. To-day, due to the thoroughness with which the work of demolition was carried out by order of Parliament—due to the spade and the gunpowder of the Roundhead vandals—there was hardly left one battlement which had not been thrown down. Further ravage had been wrought by time, weather, and tempest, and, not least, by the growth of ivy insidiously loosening the masonry. The castle was characterised by Mr. Thomas Hardy in The Hand of Ethelberta as a place of "windy corridors and mildewed

dungeons"; and the late Lord Tennyson, Poet Laureate, when passing Corfe and gazing up at the shattered keep, said with a shudder "Ugh, it's as hollow as a skull." As to the site of the castle, it was marked out by Nature for such a fortress. The steep conical hill, standing in the one great breach in the long range of Purbeck Hills reaching from Ballard cliff to Flower's Barrow, could not fail to catch the eye of the castle-building Normans. As had been said, "on the summit of the hill, isolated alike by Nature and by art, stands the majestic ruin." The site originally belonged to the Royal Manor of Kingston, but in the middle of the tenth century came into the possession of the Abbess of Shaftesbury. Among the broad lands with which that famous abbey, founded in 888, was endowed, were seven manses of land in Purbeck-at Corfe and Blashenwell, and undoubtedly including the site of the castle. It was recorded in Domesday that "of the manor of Kingston the king hath one hide in which he built his castle of Wareham, and for which he gave to St. Mary's, Shaftesbury, the church of Gillingham with its appertenances." It was quite clear, and corroborated by the later compilation of Testa de Nevill, of the reign of Edward I, that "the castle of Wareham" was not the Norman castle within the green walls of the borough, and on the site of which their member Mrs. E. S. Clark now had her residence, but was the castle of Corfe, near Although some antiquaries held that what the Conqueror constructed at Corfe was merely a castle of the mott and bailey type, yet there was nothing against the supposition that that fine example of Norman work, the King's Tower or keep, was at least begun by William I. The Queen's Tower near by on the east, though not of the same dignified altitude, was a fine example of Early English architecture and masonry. and was attributed to the reign of Henry III. Then the original castle north of the inner ditch was undoubtedly extended during the reign of Edward I, when it was supposed that the Outer Bailey was enclosed with the series of stout bastions and curtain walls, including the outer gateway, which was adopted as the device for the arms of Corfe Castle. documentary history of Corfe Castle began with the entry in the Saxon Chronicle in 978: "This year was King Edward slain, at eventide, at Corfe Gate, on the 15th day before the Kalends of April, and then was he buried at Wareham without any kind of kingly honours." Having sketched the tragic story which so powerfully impressed the superstitious imagination of the people of that day, who magnified the miraculous portents that finally led to the canonisation of the kingly youth, Mr. Pouncy mentioned that in 1911 a mild sensation was caused in archæological circles by a paper read before the Field Club by Mr. Neilson Clift, honorary secretary of the British Archæological Association, endeavouring to make out that the scene of the murder or martyrdom of Edward was not Corfe Castle, but, maybe, Coryates, at Portesham.* Mr. Clift developed his arguments

^{*} Proceedings, Vol. XXXIII, pp. 50-69.

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with much ingenuity and plausibility, as well as audacity; but the main difficulty with which he had to contend was the great body of ancient tradition, and also the records of many old chroniclers, all agreeing that the deed was done at or near Corfe Castle—Brompton mentioning that the king was hunting in a forest near Wareham. The history of Corfe as a fortress began in the troublous reign of King Stephen. It was first held for Matilda by her half-brother Robert, Earl of Gloucester. It was taken by Stephen and retaken for Matilda by Baldwin de Redvers, Earl of Devon. But the early history of the castle was not so much a history of martial assault and defence as a long story of callous and cruel incarceration. owing to which he had, with some touch of euphonious alliteration, presumed to call Corfe Castle "the Palace-prison of Purbeck." Mr. Pouncy mentioned a number of distinguished prisoners who had been confined there -Robert, eldest son of the Conqueror; Griffin, Prince of Wales; the Princess Elinor, sister of Prince Arthur, so foully done to death by his uncle, King John; the Princesses Margery and Isabel, daughters of King William of Scotland; King John's queen herself; the ill-fated Edward II. before his removal by Sir John Mautravers to Berkeley Castle. Of the 200 knights captured by John at the siege of Mirabeau, 24 were immured in the oubliettes of Corfe and, it was said, slowly and deliberately starved to death. They were indebted, continued Mr. Pouncy, to Mr. Thomas Bond for a wealth of detail about the construction and repair of the castle from time to time, which he had recovered by his assiduous researches in the Public Records Office, from the Pipe, Liberate, Close, and Patent Rolls, and other archives. Some might be curious to know what kind of garrison was maintained in the castle. There was a record that Edward II in 1322 required the Constable, Sir John le Latimer, to render account. He stated that there were 10 bowmen (sagittarii), who were paid 2d. a day each, 16 cross-bowmen (balistarii), who were paid 4d. a day each, and four men-at-arms who were paid 12d, a day each—precisely the same pay as that received by the British soldier in the earlier stages of the Great War! But every tything in Purbeck was required to provide one man for ten days for the defence of the castle in time of disturbance, and 34 of such men on duty were paid the rates mentioned, while, according to ancient custom, 12 men of the town of Corfe were paid a halfpenny a night for keeping watch and ward 40 nights in the castle. Mr. Pouncy then spoke of how in 1485 King Henry VII presented the castle as a residence to his mother, the Lady Margaret, Countess of Richmond and Derby, and he traced how it changed hands, until finally in 1635 it came into the Bankes family, where, happily, it still remains, being sold by Lady Elizabeth Cecil, wife of Sir Edward Coke, to Sir John Bankes, Chief Justice of the Common Pleas. A short but animated account was given of the siege of 1643, in which brave Dame Mary and the members of her family and household, with a handful of soldiers, and with the assistance of the valiant Captains Lawrence and Bond, held the castle successfully against the Parliamentary force under Sir Walter Erle of Charborough ("Old Wat!") and Sir

Thomas Trenchard, of Wolfeton; and finally how it was betrayed by the treachery of Colonel Pitman in 1646, and the fatal order of demolition given by the House of Commons was carried out all too thoroughly by Captain Hughes, Governor of Lulworth Castle.

A Tour of the Castle

was then made. Leading the way, Mr. Pouncy described in turn the salient and most interesting features — Edward's Gateway, with its beautifully-cut grooves for two portcullises and its machicolation, and also stone corbels for supporting the wooden hoard, from behind the shelter of which the defenders could fire at their assailants; "the Sleeve," or stepped wall, by which communication could be maintained between Edward's Gatehouse and the great Keep; the time-worn and very ancient herring-bone masonry in the second ward, over the origin and purpose of which there has been such disputation, some contending that it marks the site of the miraculous church erected by St. Aldhelm while Abbot of Malmesbury; the octagonal Butavant Tower, "the Corner Bulwark" facing west, on which small cannon were mounted prior to the Spanish Armada; the great Keep, in which the original Norman architecture has been so sophisticated by Tudor insertions; the Queen's Tower with its lovely doorways, stone benches, and elegant ornamentation; the ruins of the supposed Gloriette and Cockayne Towers; the site of the garden and well. Then, descending again to the first ward, attention was directed to the site of the second well, close by the little postern gate; the Plunkenet Tower, bearing on the outside the heater-shaped shield upheld by two human hands and presenting "five fusils in bend," the arms of Alan de Plokenet, who was Constable of the Castle in 1269—70; and the guard tower and the gatehouse tower, where, it is said, the Warrener held his court for enquiry into trespasses of vert and venison. Incidentally were described the great powers and privileges exercised by the long series of *custodes*, constables, or governors of the castle from the nomination of William de Blundevil in 1203 to the appointment of Sir John Turberville, the last governor, in 1485; and particulars were given of the Royal Warren, Forest, or

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Chase of Purbeck, which was co-extensive with the whole island, and was afforested by King John, but removed from the status of a forest under the *Carta de Foreslâ* in the reign of his son, although it was well stocked with deer right up to the troublous period of the Civil War in the seventeenth century, when the deer were exterminated by lawless bands. Many curious particulars were also given of the restrictions in force in the warren and of the oppressive forest laws.

On reaching the town square Mr. Alfred Pope, author of *The Old Stone Crosses of Dorset*, denied strongly the general statement that the new cross, which was erected in 1897 in commemoration of Queen Victoria's Diamond Jubilee, was erected on the base of the mediaeval cross. He maintained that not a stone of the present base could have belonged to the old cross. The present stones were all chisel-dressed, and not hammer-dressed, as they would have been in mediaeval times. He recalled the old order that all fish caught within Purbeck had to be exposed for one hour at the Cross of Corfe before it could be taken away, the object obviously being that the Constable of the Castle should have the pick of the market.

Mr. Pouncy called attention to the picturesque ancient features of Corfe: the old hotels—the Greyhound, date 1733, and the Bankes' Arms—the old house of the Uvedales, in connection with which he mentioned that Edmund Uvedale was one of the first two Members of Parliament whom Sir Christopher Hatton got to represent Corfe in the 14th year of Queen Elizabeth's reign. This small borough enjoyed Parliamentary representation by two members right on from that early date until it was disfranchised under the great Reform Act of 1832, Mr. George Bankes being one of the last pair of members for Corfe. Attention was also directed to the Assembly-rooms (the old Council-chamber), Corfe having been an ancient borough by prescription. Of this honour it was also shorn in 1889, Mr. Walter Ralph Bankes, of Kingston Lacy, being the last mayor.

By the courtesy of Mr. Cavendish Bentinck, the forecourt of the Elizabethan manor house, which goes by the name of Morton's House, but is the old residence of the well-known Dacombe family, was visited.

At the Bankes' Memorial School were exhibited the magnificent collection of rubbings of brasses made by Dr. Dru Drury, which includes reproductions of most of the oldest and best known English brasses. They were mounted on canvas, with the armorial bearings shown in their proper tinctures.

After the church had been visited, and the interesting church plate and church accounts inspected, a move was made for the Greyhound Hotel, where a refreshing tea was provided. A Business Meeting followed, when eight persons who had been previously nominated were elected members of the Club, and four others were nominated for future election. The proceedings closed with a very hearty vote of thanks to the Assistant Secretary, on the proposition of the President, "for his eloquent, scholarly and most interesting address," and for his services as conductor of the party throughout the day.

Somewhat earlier in the afternoon, during a break in the inspection of the Castle, the President referred to

THE PROPOSED

RESTORATION OF SHERBORNE ABBEY LADY CHAPEL,

and stated that Mr. Powys, Secretary of the Society for the Protection of Ancient Buildings, was present with them, and had attended the meeting in the hope of being allowed an opportunity of explaining his Society's objections to the scheme for the restoration of the Lady Chapel at Sherborne Abbey.

Mr. Powys said that the proposal of the Sherborne War Memorial Committee was that the Early English bay should be made the body of the new chapel, and a new bay be constructed eastward, in imitation of fifteenth century work,

to occupy a site which was probably occupied by the second bay of the thirteenth century chapel. If this extension was made eastward they would lose the appearance of this sixteenth century domestic building, and it would also take up a good deal of room in the beautiful little court. His Society were always advising against building in imitation styles. Moreover a great deal of internal restoration would have to be done if the chapel was carried down to the level of the floor of the bay. His Society suggested that the chapel should be made on the first floor, and that the ground floor rooms should be used as vestries. In this case there would not be length enough in the building for the altar to be placed at the east end; and it was suggested that it should be placed either at the south end or at the north. His Society asked the Field Club that day to pass a resolution requesting the authorities at Sherborne to reconsider the eastward extension. and before doing anything to consult some authoritative body like the Society of Antiquaries, or the Advisory Board which advised the Government in the care of its buildings.

The BISHOP OF COVENTRY said that it would be a pity if an influential body like the Dorset Field Club passed any hasty resolution on the subject without having all the details before them and having heard the other side. The scheme had not been prepared in a hurry, but had been under consideration four years, in consultation with men of knowledge and taste.

MR. W. P. SYMONDS, of Sturminster Newton, suggested that the consideration of the subject should be adjourned until the Club met at Sherborne next month. On his proposal, seconded by the Bishop of Coventry, it was resolved "that the Dorset Field Club, having considered the subject, refrains from expressing a definite opinion until after their proposed visit to Sherborne, on August 30th, and meanwhile emphasises the hope that the Sherborne Committee will not proceed with any *constructive* work until then."

SECOND SUMMER MEETING

AT SHERBORNE,

30th August, 1921.

Large as had been the attendance at the First Summer Meeting at Corfe Castle, it was eclipsed by the numbers who attended the Second Summer Meeting, which was held on Tuesday, the 30th of August, at Sherborne, when about 120 members of the Club with their friends were present. The President, Mr. Nelson M. Richardson, was supported by three of the Vice-Presidents—the Rev. Herbert Pentin (Hon. Secretary), Captain J. E. Acland (Hon. Treasurer), and Canon C. H. Mayo, D.Litt., F.R.Hist. Soc., together with Mr. Harry Pouncy (Assistant Secretary). Amongst those present were the Lord Bishop of Coventry (Dr. Yeatman Biggs, F.S.A.), &c.

SS. Johns' Hospital.

Those who arrived early at Sherborne found time to visit the fifteenth century almshouse, founded in the reign of Henry VI, in the year 1448, by Robert Nevil, Bishop of Sarum, and dedicated to St. John Baptist and St. John Evangelist. The party were conducted with courtesy over the rambling interior, with its many delightful apartments, and inspected in the common room the fine oak screen, the comfortable ancient settle round the fire, and the rich pewter plates, dishes, salt cellars and tankards; and also were shown in the beautiful little chapel the superbly painted triptych ascribed to Cosmo Roselli. It is declared to be "greatly superior in point of colouring to any work by Hans Holbein."

THE OLD CASTLE AND THE NEW.

Shortly after 12.30 the large party assembled in front of the ruined and ivy-clad keep of the Norman castle, built by Bishop Roger of Old Sarum between the years 1107 and 1139.

Although, in impressiveness of elevation, magnitude, and massiveness of remains, Sherborne must yield the palm to the premier castle of Dorset at Corfe, yet it can claim large amends in the beauty of its sylvan setting and the superior ornamentation of its Norman decorative work. For example, in the banqueting hall the arcading of intersecting arches and the window looking north, with rich chevron decoration, is beyond parallel at Corfe. The members of the club were received cordially by Major F. J. B. Wingfield-Digby, D.S.O., the 'squire of Sherborne and owner of the castle, who throughout the day was most attentive as guide and host. Major Digby was accompanied by his agent, Mr. E. A. Rawlence, a member of the club much esteemed for his archæological tastes and knowledge and the valuable researches which he has made on the Digby Estate.

MAJOR DIGBY, while modestly deprecating any claim to be an antiquary, gave a concise and interesting account of the history of the castle. Queen Elizabeth gave it to Sir Walter Raleigh in 1599. In 1609, on his being sent to prison in the Tower of London, it was taken from him and given to Robert Carr. In 1617 the castle and estates were bought for £10,000 by Sir John Digby, who was afterwards created Earl of Bristol, and who had been Ambassador in Spain. Major Digby gave an account of the sieges of the castle, ending with its reduction in 1645 by Cromwell himself. The leader of the Ironsides was so determined to take the place that he brought miners from the Mendips to undermine one side of the castle. Among other interesting stories mentioned was that of the man in the castle who shot 16 of the attacking force with a fowling-piece. Major Digby then conducted the party over the castle, showing the stone newell staircase in the gatehouse, and the small porter's lodge with its ambry for the porter's victuals.

It was a glorious day; and the scene of the first and most memorable of modern pageants, that of Sherborne in 1905, was looking its loveliest. Major Digby conducted the party through the beautiful grounds down to the side of the lake,

filled with water lilies, and showed them in turn Sir Walter Raleigh's seat, where is said to have taken place the amusing incident of water being thrown over the man who introduced smoking tobacco into England, his servants being alarmed at seeing smoke proceeding from his mouth, and thinking that their master was on fire! [This story is "located" in other places: but Sherborne Castle will stoutly hold to its claim!] The party were then conducted to the old toll house, now forming a most interesting local museum, and containing many objects of interest found at Sherborne and on the estate. Opposite the house stands the largest maidenhair tree fern in the whole country, superior even to that at Hampton Court. The principal object of interest in the building is the beautiful Roman mosaic found at Lenthay, about a mile west of Sherborne railway station, and removed here and relaid in cement—the best possible way of preserving the tesseræ. Had only the same course been taken with the Roman payement discovered at Preston, we should not now have to deplore that half the tesseræ have been removed by souvenirsnatching visitors. The pavement, which is in a perfect state of preservation, shows two figures of musicians, one playing on the lute or lyre, and the other on two pipes-possibly intended for Orpheus and Pan, or, maybe, Apollo. Near by stands the ruined socket stone of a magnificent mediaeval cross elegantly broached and richly carved. This was found at Ryall's farm, Bishopsdown, in 1911. Two of the panels are carved with scenes, one the burial of the Lord, and the other, possibly, His betrayal.

The club were then invited into the new castle, shaped on plan like a capital letter **H**. The main portion is attributed to Sir Walter Raleigh, while the wings were added by members of the Digby family at later dates. But age has mellowed all into a fairly harmonious whole. The visitors regretted that time did not admit of anything but a cursory inspection of the fine collection of pictures adorning the walls, and the *objets d'art* which the house contains. There was but a short space of time for luncheon, which members

had brought with them, and which was eaten pleasantly under the shade of the trees on the lawn, while Major Digby hospitably provided the "cooling cup." Before the party moved off to Sherborne Abbey, where they were now due, the President took the opportunity to express the warm thanks of the club to Major and Mrs. Wingfield Digby for their most kind and hospitable reception.

THE ABBEY CHURCH.

THE RESTORATION OF THE LADY CHAPEL.

At the Abbey Church the members of the Club were received by the Vicar, Canon S. H. Wingfield-Digby, who said that, as one who had the infinite privilege of ministering in that building, he could assure them that, although he had known it from early boyhood, the influence of the place grew more and more upon him with the passage of time and increasing familiarity. What appeared to be especially impressive was the glorious symmetry of the building, so lofty and beautiful, with its magnificent roof of fan-tracery vaulting, seeming to speak of great things. And yet, when the building was examined in detail, it was found to be a mass of irregularities.

At Canon Wingfield-Digby's request, the Church was described to the visitors by Mr. George King, the custodian.

Canon Wingfield-Digby took occasion to refer to the much-debated scheme for the restoration of the ancient Lady Chapel beyond the ambulatory. It was their great desire to have the ancient Lady Chapel restored to the Abbey, and the plastered walls filling the three arches opened out. He had an idea that his great uncle would not have had the reredos so narrow as it was, had he not contemplated piercing the wall at the east end on either side of the reredos to admit of a view through the ambulatory into the Lady Chapel, and thus extending the fine vista of the church as viewed from the west end, He laid stress on the fact that the Restoration

Committee, in consultation with Mr. Caröe, did not propose to remove any ancient feature whatever, but only the bay window which was thrown out at the east end of the Tudor building about 1840. In the ambulatory attention was called to the fact that the old headmaster's house comprised really three chapels—the Lady Chapel proper in the middle, with its fine thirteenth century vaulted roof and richly foliated capitals, Anchorites' chapel on the north of it, and the chapel of St. Mary Le Bow on the south, with its beautiful fifteenth century groyned roof. The party were then led into the charming little court, two sides of which are formed by the Lady chapel converted into a sixteenth century residence, and the new headmaster's house. Here Mr. A. R. Powys, A.R.I.B.A., secretary of the Society for the Protection of Ancient Buildings, who made a report upon the scheme as long ago as December, 1918, and who addressed the club on the subject at Corfe Castle, set forth again his society's objections to the restoration scheme, and alternative proposals for retaining the first floor and using it as a morning chapel, while the ground floor was adapted to vestries. Mr. A. F. GRIMLEY, hon. secretary of the Restoration Committee. answered the objections. The BISHOP OF COVENTRY, who spoke at the invitation of the President, declared frankly that the constructive proposal of the Society for the Protection of Ancient Buildings appeared to him to be quite bad. If it was carried out, then the Lady Chapel, as viewed from the Abbey church, would remind them of a doll's house. It would be a very ugly and undignified east end for a church of the grandeur and beauty of Sherborne. But if they could gut the whole building of its modern floors and partitions, and open out to view the wonderful and beautiful thirteenth and fifteenth century groyned roofs, they would have a conservative restoration and a delightful view, dignified and pleasing to the eye, The President expressed his objection to Mr. Caröe's proposed eastward extension. He thought it too ornate. The discussion was resumed at tea afterwards, when Mr. VERE OLIVER, F.S.A., of Weymouth, moved "That the Dorset Field Club approves generally of the scheme put forward by the Sherborne Restoration Committee, but, until the floors of the school building are removed, is unable to form any opinion on detail except that, if any addition be considered advisable, it should be of a simple character." This was seconded by COLONEL W. D. DIXON, and, after a long discussion, carried nem. con.

THE SCHOOL BUILDINGS.

On leaving the Abbey church the party were conducted over the buildings of Sherborne School, incorporating as they do the remaining portions of the domestic buildings, &c., of the Benedictine Abbey. They were conducted by Mr. Scott, the school custos, while in the library the librarian, Rev. W. J. Bensly, who has with much care re-arranged and recatalogued all the books, showed them the special treasures of the place.

Tea was afterwards served in the Church Hall, the arrangements for which had been made by Mr. Pragnell, of the Half Moon Hotel.



THIRD SUMMER MEETING

AT SHAFTESBURY.

22nd September, 1921.

The last of the Summer Meetings of the Field Club, which was held at Shaftesbury on Thursday, September 22nd, was again largely attended; the members and their friends, who availed themselves of the privilege of joining in the "excursion," numbering about 90. The President, Mr. Nelson M. Richardson, was accompanied by the Rev. Herbert Pentin (Hon. Secretary), Canon Fletcher (Hon. Editor), Mr. E. R. Sykes, F.Z.S., and Mr. Alfred Pope, F.S.A., Vice-Presidents of the Society, together with Mr. Harry Pouncy (Assistant Secretary). Mr. R. Quick, F.S.A., and Mr. E. Doran Webb, F.S.A., were also members of the party.

Upon assembling in S. Peter's Church, the President expressed his gratification at the club once more having the pleasure and advantage of welcoming Mr. E. Doran Webb as their guide to the town, upon which he was such a recognised authority. He knew of no more successful and delightful *cicerone*.

MR. DORAN WEBB observed that the church was of very late Perpendicular style of architecture. The late Perpendicular churches of the fifteenth century were the glory of Somerset and "a joy for ever;" but, as they knew, towards the close of the fifteenth century, Gothic architecture suffered a decline, and churches were by no means so carefully and artistically built as their predecessors had been.

In that church, which was the only old one now remaining out of a considerable number, they would notice that the rude rough caps of the columns were unfinished. In dating the church they received some help from the adornments of the outside of the parapet wall. Upon it they would recognise the Yorkist sun and the portcullis of Henry VII, who ordained that the parapet wall of his chapel of Westminster should

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bear his badges of the portcullis and sun. In the north-east corner of the church was the Lady Chapel, in which was placed in the floor a small pre-Reformation brass with a partially-erased inscription in Latin. In the south aisle was a vault, sometimes called "the crypt," in which spirits used to be stored, and from which they were taken at night to the adjoining inn. This inn had a window which connected it with the church. At the east end of the church were some remains of a mediaeval house. Amongst various features of interest in the church might be noted the fine Jacobean Communion table; the ancient glass in the east window, where would be found the arms of the Payne family, one of whom was the seneschal or steward of the abbey; the beautiful west porch with its holy-water stoup: and the church register, the earliest entry in which was dated 1623.

The party then, by the courtesy of the Mayor and Corporation, visited the

TOWN HALL,

where they inspected in the Council-chamber the oak chest which contained the borough muniments; the Winchester standard bushel of bronze bearing in raised letters the inscription "Lewis Evans, Mayor of the Burrough of Shaston, 1670," and also the the later bushel measure of wood, bound in bronze, and inscribed "Shaftesbury in Dorsetshire, 1770." The fifteenth and seventeenth century maces, belonging to the Corporation, which are two of the oldest in the county of Dorset, were inspected with much interest. Mr. Doran Webb recalled with pleasure the honour which had been conferred upon him in his being made a freeman of the borough of Shaftesbury. The Corporation was older than any other in Dorset, and, possibly, was the oldest in the west of England. The city of Shaftesbury went back as far as the early Saxon charters, and there was definite record of it as early as the ninth century. From the foundation of the abbey by Alfred the Great, Shaftesbury became the third city in the west of England. In addition to the magnificent abbey, there were eight or nine other churches, most of which however had

disappeared entirely. The city had also possessed its own mint. The Grammar School still remains. Sometime ago there was brought to him a copy of the Apocalypse written in Norman French verse in the fourteenth century by one William Gifford, who described himself as having been "chaplain of the abbey of St. Edward." The seal of the borough bore the date 1570 (the 13th year of Queen Elizabeth). Humorously, Mr. Doran Webb reminded his hearers of the old derisive saying about Shaftesbury:—that here "Beer is more plentiful than water: The town stands higher than the church steeple: and rogues are more commonly met with than honest folk." After the President had cordially thanked the Mayor for his courtesy, a move was made to the back of the Town Hall, to the top of Gold Hill, where the magnificent prospect of the Vale country could be viewed, with the rich green of the foreground melting away into the blues and grevs of infinite distance

SHAFTESBURY ABBEY

is the property of Mr. Robert Borley, of "The Commons," Shaftesbury, who most kindly welcomed the members within the enclosure, the ordinary entrance fee being waived. Thanks to extensive excavations carried out some years ago, under the superintendence of Mr. Doran Webb, the greater part of the site of the abbey has been cleared of the accumulation of the débris of centuries, and the whole plan of the abbey church and of some of the other conventual buildings can be easily discerned. Taking his stand at the crossing of the abbey church, Mr. Doran Webb said that when he first came to that spot the soil covered it to a depth in some places of 13 feet, and it was used as a vegetable garden! He and his colleagues removed this vast accumulation, uncovered the site, published plans and annual reports of what they found, hoping that some day a larger body than themselves would take the site over and make a national matter of it; but in that hope they had been disappointed. The length of the church approximately from east to west was 590 feet, and over the 1

spot on which they were then standing was a tower and a great spire. He had found a rough copy of a drawing on an old MS. deed belonging to the Pembroke family, on which there was a view of the church taken about 70 years after its destruction. In this view they could see remains of the tower. Tradition said that the lead was stripped off the tower, and the wet consequently got into the vaulting, causing the tower and spire to become insecure. Eventually they fell and broke the whole church to pieces. The place then became a quarry, from which stone was drawn for the erection of houses round about; and it would be hard to-day to find in Shaftesbury any wall over 200 years old which had not embedded in it some stones of this famous church. The extent of the church was little inferior to that of Ely Cathedral of the present day. The original plan of the church differed in no way from many of those of twelth century buildings. There was a Norman nave ending in an apse, with transepts and shallow side aisles and possibly ambularium. Later the authorities were compelled to open out the transepts by cutting into the east wall of each transept a large chapel. On the right side they saw two chapels pierced in the east wall, and on the left one. Under the chapel was a crypt in which were deposited the relics of St. Edward, King and Martyr, whose body was solemnly translated from Wareham to Shaftesbury about two years after his murder at Corfe Castle. When they inspected the site he found parts of the twisted spiral columns which supported the canopy over his tomb. These fragments of the columns, still bearing the original red, blue, and gold, were found lying on the floor below. The apsidal east end of the church was pierced, and, extending eastward, was a great Lady chapel added in the fourteenth century. The finds of stone and stained glass were under the care of the Corporation, and were housed in a temporary building close at hand; but he did not think that all of the finds were included, notably a glass bowl which he found broken to pieces under a heart-shaped marble slab 20 feet east of the altar. It was probably tenth century glass. The cloisters lay to the south. The tiled pavement was absolutely perfect beneath the grass. From

the south-east angle of the cloister the Chapter-house was entered, and they discovered the beginning of the inscription which Camden found there when he visited Shaftesbury, said to be part of the inscription to the memory of the first abbess, the daughter of Alfred the Great. The tombs had been filled up with carved tabernacle work. The stained glass, of which they took out three cart-loads, was still in cases.

The President expressed gratitude to Mr. Robert Borley for admitting the club there. Mr. Borley said he was delighted to welcome the club. He deplored the present neglected state of the site, which is due entirely to the lack of interest and care shown by the previous owners, the Corporation. He hoped before long to improve matters.

The building in the south-west corner of the site was next visited, in which are stored, though without any attempt at methodical arrangement, the many fragments of ancient carved stone, &c., which had been discovered.

St. John's Cottage

on the site of St. John's Church was next visited, with the Latin cross, standing in the garden, into which were let four small alabaster carvings protected with glass. On the one side they represented (a) our Blessed Lord supported by angels and (b) the Holy Trinity. The subjects carved on the other side of the cross are undecipherable. It had been assumed that the cross had been erected and placed there for the use of pilgrims en route to the abbey; but Mr. Alfred Pope, F.S.A., author of Old Stone Crosses of Dorset read a description of the cross, and pointed out that its position had twice been changed within living memory, and Mr. Doran Webb expressed the opinion that the base alone was of the fourteenth century: but that the cross itself was modern.

Returning by way of Bimport Street, Mr. Doran Webb stated that the curious name was considered to be a contraction of Beamport, that is to say, the *beam* for weighing purposes, which stood by the *port*, or gate, of the abbey grounds. Here the residence which goes by the name of

"Mr. Groves' House" was inspected. It is an admirable specimen of an early sixteenth century town house, and contains some good Jacobean carved chimney-pieces, doorways, &c. Mr. Doran Webb mentioned that Mr. Groves came there as steward to Lord Pembroke after the dissolution of the abbey. He expressed the opinion that the steward of the abbey lived in that house. Close by, he said, was a large block of buildings some 800 feet long, always kept in readiness to receive any personage whom the Royal Family might send down.

Dr. Harris's House.

The club next viewed Dr. Harris's house in Angel-square, containing a panelled-oak roof and an old balustered staircase. Mr. Doran Webb said that it was an almost perfect example of a house built in the early part of the sixteenth century.

The party assembled for tea at the Grosvenor Hotel, where many inspected with interest the remarkable sideboard carved in oak with a life-like representation in high relief of the battle of Chevy Chase, said to have been carved at the instance of a former Duke of Northumberland from an original that is in Alnwick Castle. After tea a short business meeting took place, when eleven nominees were unanimously elected members of the club, and eleven other persons were nominated.



FIRST WINTER MEETING.

6th December, 1921.

The opening meeting of the Winter Session of the Field Club was held in the Reading Room of the County Museum, at Dorchester, on Tuesday, the 6th of December, at 12-30 p.m.

The President, Mr. Nelson M. Richardson, was in the chair, and was supported by five Vice-Presidents — the Rev. Herbert Pentin (Hon. Secretary), Capt. J. E. Acland, F.S.A. (Hon. Treasurer), Canon Fletcher (Hon. Editor), Mr. Alfred Pope, F.S.A., and Mr. Henry Symonds, F.S.A., with Mr. Harry Pouncy (Assistant Secretary). Upwards of forty members of of the Society were present.

Eleven persons, who had been nominated for membership at the September meeting, were balloted for and elected unanimously. There were in addition nine further nominations.

Mr. Alfred Pope congratulated the Club on the considerable accession to membership. This, he said, was an evident indication of its rapid recovery from the temporary set-back due to the war, and bore witness to its increasing popularity.

ANCIENT EARTHWORKS REPORT. The report of the Ancient Earthworks' Committee for 1920 was duly presented. The Hon. Secretary stated that the two delegates (His Honour Judge Udal and Canon Mansel-Pleydell) had attended the Congress of Archæological Societies.

Mr. Alfred Pope expressed his pleasure that the valuable relic of antiquity, the Cerne Giant, had been placed in the custody of the National Trust; but it was a matter of great regret that considerable damage had been done to the pre-Roman camp of Poundbury, owing to its use as an internment camp for prisoners-of-war during the late war. He suggested that the Club should approach the Duchy of Cornwall in

the endeavour to get the damage which had been done repaired. It was especially on the once beautiful green slope of the eastern glacis that it had suffered; and the present was an opportune time for renovation, as it would give work to many of the unemployed. Moreover, Poundbury had always been open to access to the general public, not only as a place of antiquarian interest, but also as a resort for recreation. He regretted, however, to say that, now, every gate was locked and barred; and he feared that the place might be closed to the public for ever unless some firm action was taken to assert their rights. He suggested that a petition should be sent from the Club to the Mayor and Corporation of Dorchester urging them to look after the public interests at Poundbury.

Mr. Pope's double proposal was immediately approved of by those present, and the Honorary Secretary was authorised to communicate both with the Duchy of Cornwall and with the Corporation of Dorchester. Mr. Henry Symonds asked whether Poundbury had been scheduled by the Office of Works as an ancient monument, and, on learning from Mr. Pope that it had been proposed that it should be done, this also was agreed to.

EXHIBITS.

- (1). By the President :—
- (a). "A Godly Exposition of the 1st Epistle of S. Peter," written by the Rev. John Rogers, of Dedham, Essex, in 1650. From this work several extracts were read, including some curious passages about servants, &c., which seem to be singularly appropriate to the present day.
- (b). A fine collection of Dorset diptera (flies), which he had collected, and which had been named and arranged by Dr. Haines, and had lately been given to the Dorset Museum.

THE PRESIDENT, in asking Dr. Haines to say a few words about the subject, described him as a first-rate dipterologist, and said that he had not only arranged and named the insects, but had also added considerably to the collection, which had

been presented to the Museum. The arrangement of these 20 drawers of flies, with thousands of different names, had taken a good deal of time, as well as having involved a considerable amount of skill and of expert knowledge.

DR. HAINES, in calling attention to the drawer of handsome hawk flies, said that they are most useful insects, as they feed entirely upon aphides. The hawk flies lay their eggs wherever they see the aphids, and the larvæ, when hatched, consume an enormous number.

CAPTAIN ACLAND warmly thanked the President and Dr. Haines for this valuable addition to the Museum. Mr. RICHARDSON observed that there is plenty to do in Dorset in connection with flies.

- (c). A "George Washington" Jug, dated 1732, with the name of George Washington upon it.
 - (2). By Mr. A. E. D. PRIDEAUX.
- (a). A case of Commemorative Medals, lent by Mrs. Logan, Mr. Richard Hine, of Beaminster, and others.
 - (b). A fossilized bone.
 - (3). By Mr. O. C. VIDLER.
- (a). A "Washington" Pump Head, obtained from an old house at Cerne.

THE PRESIDENT observed that the leaden pump-head bore the date 1691; and the initials. T.M.W., were those of Thomas and Mary Washington, who were reputed to be kinsmen of the eminent President of the United States and Commander-in-Chief of the Republican forces in the American War of Independence.

The Rev. Grosvenor Bartelot added some interesting information relative to the Washington family in Dorset.

(b). Some Roman coins found at Dorchester.

MR. HENRY SYMONDS, F.S.A., gave the following description of the coins:

- No. 1. Obverse. IMP (Imperator) NERO CAESAR AUG PP.
 Reverse. S.C. S.P.Q.R. (on Globe).
- No. 2. Obverse. IMP (TRA)IANUS HAD(RIANUS) (found on the site of the London City and Midland Bank, 1915).
- No. 3. Obverse. IMP CAES NERVAE TRAIANO AUG GER DAC (Germanicus Dacicus)
 PP. COS VII (?VI)
 Reverse. S.P.Q.R. (OPTIMO) PRINCIPI. SC
- No. 4. Obverse.* IMP : GORDIANUS : PIUS : FEL : AUG Reverse. (JUSTICIA) AUG
- No. 5. Obverse. IMP: C: AURELIANUS: AUG Reverse. PROVIDENTIA. LXXT. (found in the South Walks, 1913).
- No. 6. Obverse. IMP: C: ALLECTUS: P.F.: AUG Reverse. VIRTUS: AUG: QL (Quarta Londinium). (found at Ackerman Lane, 1921).
- No. 8. Obverse.CONSTANTIUS
 Reverse. PROVIDENTIA PTR (TREVES
 Trevirorum)
 (Pretorian gate).
- No. 9. As above. (? Romano-British).
- No. 10. Obverse. CONSTANTINUS PF AUG
 Reverse.PLG (Lugdunum....Lyons)
- No. 11. Obverse. IMP CONSTANTINUS
 Reverse. SOLI INVICTO COMITI PTR (Treves
 Trevirorum)
- No. 12. As above. PLN (Londinium).

PAPERS.

- (1). "The Black Death in Dorset," by Canon Fletcher. (Printed).
- (2). "Monumental Brasses of England (Military)," illustrated by rubbings, by the Rev. H. M. Wellington.
- (3). "Dorset Church Woodwork," by Mr. E. T. Long. (Printed).

SECOND WINTER MEETING.

21st February, 1922.

The Second Meeting of the Winter Session of the Field Club was held in the Reading Room of the County Museum at Dorchester, on Tuesday, the 21st of February, at 12-30 p.m.

The President, Mr. Nelson M. Richardson, who was in the chair, was supported by six Vice-Presidents, viz.:—the Rev. Herbert Pentin (Hon. Sec.), Capt. J. E. Acland, F.S.A. (Hon. Treasurer), Canon J. M. J. Fletcher (Hon Editor), Mr. Alfred Pope, F.S.A., Mr. W. de C. Prideaux, F.S.A., and Mr. Henry Symonds, F.S.A., with Mr. Harry Pouncy (Assistant Secretary). About fifty members of the Club attended the meeting.

Nine ladies and gentlemen, who had been nominated for membership at the December meeting, were unanimously elected by ballot. There were in addition seven further nominations, amongst whom were the Right Rev. St. Clair Donaldson, D.D., Lord Bishop of Salisbury, and the Hon. Lady Cecil, C.B.E., of Lytchett Heath. The PRESIDENT observed that, as the late Bishop of Salisbury had been a member of the club, it would be a great happiness for them to welcome the new Bishop. They were also glad to have the long connection with the Cecil family kept up; and more especially so, because they remembered all that the late Lord Eustace Cecil had done for the club, of which for two years

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he had acted as President in succession to Mr. J. C. Mansel-Pleydell. He had, too, been the generous founder of the Cecil medal competition. Mr. Richardson also reminded the members of the remarkable work on Gardening in England, of which the Hon. Lady Cecil was the authoress, and he alluded to her knowledge of old books, in both of which respects she would be a valuable acquisition to the club.

Congress of Archæological Societies. The report of the Delegates of the Dorset Field Club (Canon J. C. M. Mansel-Pleydell and His Honour I. S. Udal, F.S.A.) to the Congress which was held at Burlington House on the 29th and 30th of November, 1921, was read. In the report of the "Committee on Ancient Earthworks and Fortified Enclosures, &c.," mention was made of the acquisition for preservation by the National Trust of the "Cerne Giant." * Reference was also made to the fear that had existed lest injury might have resulted to the pre-Roman Camp at Poundbury on the outskirts of Dorchester owing to the large hutment for German prisoners-of-war that had been placed on its eastern slopes. Captain Acland had, however, reported that, "although there had been no serious mutilation of the ramparts, the banks appear to have been lowered or worn away in some places, either by sentries or by wear and tear." The annual address of the chairman, Sir Hercules Read, was mainly devoted to remarks and suggestions relative to the preservation of the exterior of churches and other ancient buildings, which subject had, he said, recently been dealt Mr. E. S. Prior, Slade Professor at Cambridge, and by Professor W. R. Lathaby, F.S.A. He spoke of the ravages caused by atmospheric action arising from deleterious gases or other evil influences which was more especially prevalent

^{*} The block for the accompanying illustration has been very kindly lent to us by the "National Trust for the preservation of places of historical interest," &c.

The Hardy Monument, near Portesham, is also under the care of the Trust. Editor.

in industrial centres, referring e.g. to Westminster Abbey, St. George's Chapel at Windsor, and the Peter Rylands' Chapel at Manchester. Professor Prior advocated strongly the retention of what was left of old stonework in the state in which it was found instead of replacing and renewing it. An arrestive and preservative solution can now be made effectively, and has been experimented upon by the Office of Works, to counteract or destroy the special enemies, whether from atmospheric or other sources, that attack the stonework. Professor Myres, F.S.A., then made a brief statement of the programme of the Haverfield Trust for Research in Roman Britain, and expressed a hope that notices of any discoveries relative to Roman Britain would be made to the Haverfield authorities at the Ashmolean Museum at Oxford. especially wished to hear of newly discovered Latin Inscriptions, and of fresh evidences as to the course of Roman roads. Crawford introduced the subject of the Archæological Survey in counties, and exhibited a series of 6in, maps. He referred to a very interesting paper entitled Notes on Archaeology for guidance in the Field, the result of many experiences, which had been drawn up in order to give assistance in recognising antiquities at sight.

The Rev. H. Pentin said that the *Notes on Archæology for guidance in the Field*, was the most succinct and valuable short work of the kind that he had ever seen. A cordial vote of thanks was passed to the delegates.

Public Rights on Poundbury.—The Hon. Secretary reminded the club that at the last meeting he was instructed to write to the Dorchester Town Council and to the Duchy of Cornwall in respect of the important subject of the preservation and restoration of Poundbury, which had in the past been so favourite a resort for recreation. He read an answer which he had received from Mr. J. Adrian Hands (acting Town Clerk) saying that for many months the Town Council had been endeavouring by every means in their power to induce the Duchy of Cornwall to reinstate the Poundbury

slopes—both to provide work for the unemployed and to restore to the townfolk their ancient recreative rights over the whole of Poundbury. Mr. Walter Peacock (the Duchy's steward) had answered that negotiations between the Duchy and the War Office were still in progress with a view to the restoration of the banks of the earthworks, and he had no doubt that satisfactory arrangements would be come to. Mr. Alfred Pope said that the matter should not be allowed to drop. It was of the utmost importance that the earthwork should be open to the public as before the war, for there appeared to be an attempt to stop the rights-of-way by locking some of the gates and by people being treated as trespassers if they went there. If further efforts with the Duchy had not the desired effect, then the people of Dorchester ought to call a mass meeting to uphold their ancient rights.

EXHIBITS.

(1). By the President.

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A copy of "Queen Elizabeth's Prayer Book," dated 1590, on which he read the following note:—

"A Booke of Christian Prayers, collected out of the ancient writers, and best learned in our time" is the first part of the title of the present volume, which usually goes by the name of "Queen Elizabeth's Prayer Book." This arises from the fact that a woodcut of Elizabeth praying is on the back of the title, and more especially because in the first, and perhaps one or more other editions, the prayers for the Queen are in the first person. On this account it is supposed to have been printed specially for Queen Elizabeth. In the present edition of 1590, however, the prayers for the Queen are in the third person as in the book of Common Prayer. Of the first edition in 1569, Lowndes says that the only copy is at Lambeth Palace. There were also editions in 1578, 1581, 1590 (the present one) and 1608.

As the title suggests, this is not a book of Common Prayer, and, excepting the Litany and a very few of the prayers, the contents have no connection with it. The prayers refer to a great variety of subjects and conditions—there are prayers to be said at our first waking,—at our uprising,—at the putting on of our clothes,—at our first going abroad,—when we unclothe ourselves to bedward,—at our going into bed,—when we be ready to sleep,—and many others. Towards the end of the book comes the Litany and its accompanying prayers, including one for the Queen's Majesty as in

the book of Common Prayer. The language of the prayers generally is quaint, but earnest and impressive. The great feature and beauty of the book is its woodcut borders, which are very similar in style to those of the Books of Hours of the Virgin, of which so many were printed in France at the end of the fifteenth and early part of the sixteenth century. first few pages (unnumbered) have only narrow ornamental borders; but on fol. 1 begin the small cuts of Biblical subjects on the outer margin and bottom of each page with descriptive quotations taken (but by no means always accurately) from the Genevan or "Breeches" Bible, first published in 1560. A cut from the New Testament is generally accompanied by two or more types from the Old Testament, and the cuts in general through the book are repeated once or twice, but irregularly. There are also ornamental borders on the top and inner margin of each page. On fol. 41 begins a series of larger cuts of the virtues trampling on their corresponding vices, the first being Temperance standing on Intemperance, both being represented by characteristic figures. On fol. 52 begin some curious small cuts representing various forms of charity, in connection with which I may remark that most pictures of people in bed in those and earlier times seem to represent three or more in the same bed, so I suppose this was the usual practice. On fol. 52 there are three cuts of feeding the hungry in which a charitable person is offering an immense plateful of food to the recipient of his bounty. On the reverse side it is interesting to note that they are drinking out of large saucers or bowls, which they hold by the rim, probably wooden. One jug must I think be metal, the others may be of earthenware. Then on fol. 55 begin the five Senses, followed by eight pages of remarkable small cuts of the last Judgment, those on fol. 58 shewing two men in the field, one of whom is stripped of his clothes and taken upwards by an angel, the other in his full dress being seized by a demon. On the next folio are cuts of the sea with fishes and merman and mermaid, followed by earthquakes, herbs dropping blood, groups of frightened animals and birds, including the unicorn, and the general resurrection. After some repetition comes on fol. 82 one of the striking features of the book, a long series of small cuts of the Dance of Death on the outer margins of the pages, the top, bottom and inner margins being filled with tombs and skeletons in different attitudes. The dance of death, so popular in mediaeval times, consists of a series of pictures, in each of which Death in the form of a skeleton, occasionally dressed up, takes hold of and leads away a person in a different rank of life, the Emperor, King, Marquis, Judge, Sheriff, Physician, Astronomer, Aged man, Infant, Beggar, and many others, as well as the Queen, Baroness, Judge's wife, Lawyer's wife, &c. These cuts finish up on the reverse of fol. 137 with two cuts (missing in my copy, but to be seen on the last page but one of the Psalms in the 1863 Prayer Book), one shewing Death striding over a number of corpses, the other, Death in a chariot drawn by stags. "Thus death has brought all things to nought." The colophon, with a large heraldic device, ends the book,

This noted book has been said to be the choicest volume produced in England during the sixteenth century, and to equal in beauty the French printed Books of Hours above referred to. The first statement may be true, but possibly some other books might have a claim to that position. As to the French Books of Hours, I have brought one or two leaves of two editions so that you may judge for yourselves; but personally I regret to say that I think that the French carry off the palm. However, it is a most attractive and interesting little book as well as a very rare one, which must be my excuse for offering for your inspection an imperfect copy.

I have brought by way of illustration a modern book of Common Prayer (1863) in which all the pages have borders in inferior imitation of Queen Elizabeth's Prayer Book, and in which you will see on the back of the title an imitation of the cut of Elizabeth at prayer which is missing

from my copy of the original.

Another edition of the Book of Common Prayer with similar borders, but probably better executed, was published by Pickering in 1853. I may mention that I made the facsimiles and notes in my Queen Elizabeth's prayer book from a perfect copy most kindly lent me by Mr. Bernard Quaritch.

(2). By Captain Acland, F.S.A.

A large bundle of deeds, relating to property in the parishes of Sturminster Marshall and Corfe Mullen, owned, until very recently for the most part, by Mr. G. O. Churchill, of Alderholt Park, near Verwood. The deeds have been presented to the Dorset Field Club, at the kind suggestion of the Rev. James Cross, by Mr. Churchill's nephew and heir, Major Mackintosh. The documents comprise, amongst the usual deeds, a volume which is in effect the "Court Roll" of the manor, together with a MS book of a survey, which is also of considerable interest.*

Another deed of the sixteenth century was exhibited by Mr. A. W. Marks, of Gray's Inn. In connection with this, the seal of which was intact, Mr. Pope alluded to the impression

^{*} Mr. Henry Symonds, F.S.A., has very kindly acceded to the request of the Executive, and has examined and catalogued the deeds. The catalogue will be found printed in this volume (pp. 57—64), and form a supplement to the Calendar of Dorset deeds which was published by him in our *Proceedings*, Vol. XXXII, pp. 95—181. (1911). EDITOR.

which some people have that in old days a half guinea, or some other coin, was embedded in the wax, and that, in making the statutory declaration, the man with his finger on the seal said "I deliver this as my act and deed, and within this seal have placed a true coin of the realm." It was conjectured that the reason why so many seals were broken was from the searching for half guineas which they were supposed to contain. Mr. A. E. D. Prideaux humorously suggested that the seals on old documents should be X-rayed to see if coins were really in them.

On the proposition of the President and of Canon Fletcher, the hearty thanks of the Club were accorded to Major Mackintosh for his acceptable gift, and to the Rev. James Cross, who has always the interests of the Club at heart, for his kind offices in requesting that the decds should be given.

(3). By CANON FLETCHER.

- (a). An Administration Bond of the Peculiar and Exempt Jurisdiction of Canford and Poole, dated June 23rd, 1591, whereby Edward Tite, David Tite the elder, and David Tite the younger, the executors, were empowered to deal with the estate of Richard Geare, of Poole, deceased.
- (b). Another Administration Bond of the Canford and Poole Peculiar, dated July 26th, 1611, by which William Pynson, of Canford Magna, husbandman, was bound under a penalty of £6 to administer truly the effects of his son, William Pinson, of Great Canford, husbandman. This will was nuncupative, or had been made by word of mouth only and not in writing.
- (c). A document, dated July 26th, 1611, issued by the Official of the Peculiar and Exempt Jurisdiction of Wimborne Minster, and binding John Shitler, of Cowgrove, husbandman, under a penalty of £4, to pay to his natural daughter Elionor Shitler, "when she shall accomplishe her full or lawfull age or be maryed," the value of $3\frac{1}{2}$ acres of wheate, praysed at 20/-, bequeathed to her by Allen fflooke, and which had, with the consent of the Official, been delivered to the said John Shitler by Richard fflooke the Executor.

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- (d). A much more modern Administration Bond, dated September 6th, 1834, issued by Henry Bankes, Esq., M.A., of Kingston Lacy, who at that time was the Principal Official of the Wimborne Peculiar, by which Christopher Vey, son of Samuel Vey of Wimborne Minster, Auctioneer, was empowered to deal with the effects of his father who had died intestate.
- (e). A Marriage Licence issued on October 1st, 1887, by Robert Hopkins, the Principal Official at that time of the Peculiar and Exempt Jurisdiction of Wimborne Minster.

Upon these Canon Fletcher read the following note:— In Volume XXXVIII of the Proceedings of our Club, pp. 93—111 (1917). will be found a Paper dealing with some of the parishes in Dorset which claimed a peculiar and exempt jurisdiction, and more particularly with Wimborne Minster, of which at the present time I have the honour to be the Principal Official. Originally the position was one of much influence, and included the holding of a Probate Court together with a considerable amount of Judicial authority so far as ecclesiastical and moral offences were concerned. The Court of the Peculiar came to an end in 1846, when the Probate Court was removed to Blandford, where the old wills are now kept. And the only vestige of the ancient privileges which now remains is the power of issuing marriage licenses for the parish and immediate neighbourhood—a privilege which I possess, although I have never availed myself of it, as I have for many years been a Surrogate in the Diocese of Salisbury. There were four of these Peculiars in the same neighbourhood, viz., those of Wimborne Minster, Sturminster, Canford and Poole, and Corfe Castle. Impressions of the seals of the Officials of all four may be seen in the County Museum. The Vicar of Longfleet, who is the Official of the Canford Peculiar, issues marriage licenses at the present day.

Although, with the abolition of the Probate Court of the Peculiar, the wills were removed to Blandford, a considerable number of Administration Bonds still remain at Wimborne. I need hardly say that such a bond is not a will; but it is an affidavit, and obligation, under monetary penalty, upon the executor or administrator, to pay the just debts of the deceased and to carry out honestly the testamentary dispositions, if any. The value and interest attaching to these and to the marriage licenses is that in many cases they antedate the earliest entries in the existing Parish Registers.

- (4). By Mr. Alfred Pope.
- (a). A Manuscript Book, dated 1774, containing a full account of two voyages of the ship 'Snow Africa,' the property

of John Chilcott and others, from Bristol, with a mixed cargo, consisting of Manchester goods, clothing, spirits, flint, muskets, gunpowder, large quantities of beads amounting in value to £5,000, for barter for slaves, ivory, and other African produce, for shipment to the West Indies to be disposed of there.

(b). Two MSS Books, being the Orders and commission given to Capt. John Chilcott, Jun., the son, Commander of the "Tartar," a Privateer, on her first and second voyages against the French, Spanish, and Americans, in the war with those nations in the years 1778 and 1779.

MR. POPE stated that the Chilcotts mentioned were Dorset men, who hailed from Watton near Bridport, and were connected with the Bragges of Sadborough, the Balstons of Martinstown, the Threshers, and other Dorset families. Capt. John Chilcott's brother-in-law, James Balston, married as his second wife, Mary, sister to Sir Thomas M. Hardy, of whom all Dorset men are so justly proud.

(5). By MR HENRY SYMONDS.

Some Weymouth coins of Charles I, said to have been struck at Sandsfoot Castle.

(6). By Mr. W. de C. PRIDEAUX.

A portion of the original brass, which had been missing from Milborne St. Andrew Church, and which has fortunately been recovered, to the memory of John Morton, nephew of the famous Cardinal Morton.

- (7). By Mr. A. E. D. PRIDEAUX.
 - (a). The commencement of a wasp's nest.
 - (b). A silver denarius of Domitian.

(8). By Dr. Dru Drury.

A silver groat of Edward III, dug up at a depth of three feet at Corfe Castle.

PAPERS.

The following papers were read:-

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- (i). "The case for an Anglo-Saxon Mint at Bridport," by Mr. Henry Symonds, F.S.A. (Printed).
- (ii). "Whitcombe Church, Dorset," by the Rev. M. Persse Maturin. (Printed).

The Rev. H. Pentin, in thanking Mr. Maturin, said that undoubtedly Whitcombe, which used to belong to Milton Abbey, was one of the most interesting of the smaller churches in Dorset.

- (iii). "The Priest's Cell, discovered during alterations to the Bridge, Lyme Regis," by Dr. WYATT WINGRAVE, was read, in his absence, by Mr. W. de C. PRIDEAUX. (Printed).
- (iv). "Ancient Stained Glass in Dorset Churches," by Mr. E. T. Long. (Printed).



ANNUAL BUSINESS MEETING.

Tuesday, May 2nd, 1922.

The Annual Business Meeting was held in the Reading Room of the County Museum, at Dorchester, on Tuesday, May 2nd, at 12-30 p.m. The Chair was taken by the President (Mr. Nelson M. Richardson) who was supported by four Vice-Presidents—the Rev. Herbert Pentin (Hon. Secretary), Canon Fletcher (Hon. Editor), Captain G. R. Elwes, and Mr. Alfred Pope, F.S.A., with the Assistant Secretary (Mr. H. Pouncy). There was a large attendance of members of the Club.

ELECTION OF MEMBERS. Seven persons, who had been nominated as candidates for membership at the February meeting, were elected by ballot. Amongst these were the Bishop of Salisbury and the Hon. Lady Cecil, C.B.E. Eight additional candidates for election were nominated.

Presidential Address. Mr. Nelson M. Richardson delivered his eighteenth Presidential Address, in which he gave a masterly summary of the whole range of scientific investigation during the past year.

A very hearty vote of thanks was proposed by Captain Elwes, the oldest member and officer of the club present, to the President for his excellent address, which he thought was fully equal in ability and interest to his many past achievements in that direction. The vote of thanks was seconded by Mr. Alfred Pope, who said that the address covered a wide field of enquiry, and showed profound knowledge of the manifold subjects discussed. He congratulated Mr. Richardson on his remarkable versatility and the invariable freshness of ideas which he displayed. The vote of thanks was accorded with acclamation, and briefly acknowledged by the President.

REPORT OF THE HON. SECRETARY (The Rev. H. Pentin).

The past year has been a very successful one. Our membership at the moment (apart from Honorary Members) is 383, and, if the new nominees at this annual Business Meeting are elected at the next meeting, our membership will be 391, which means that there would then be only nine vacancies, as the membership of our Club is still limited to 400.

The Summer Meetings, at Corfe Castle, Sherborne, and Shaftesbury, were very pleasant and well attended gatherings, and the Winter Meetings reached a record attendance. The work of the Sectional Committees is beginning again on a small scale—a work which lay altogether in abeyance during the period of the war.

My financial statement of accounts for the summer meetings shows a balance in hand of £10 4s. 6d., an increase of over £3 on that of the previous year. The accounts have been audited, and the vouchers lie upon the table.

HON. TREASURER'S REPORT. In the absence of the Hon. Treasurer (Captain Acland), who was away on holiday in Cornwall, his Financial Report was read by the Hon. Secretary, and showed a credit balance of £139 3s. 1d., as compared with that of £150 4s. 0d. in the preceding year.

THE HON. EDITOR (CANON FLETCHER), read the following Report.

It is not only by the addition of members, but also in the speed of printing, that we are showing evidence of our recovery from the effects of the war. I quite hope that this year's Volume will be in the hands of our members within a reasonable time after to-day's meeting. The papers read at our Winter Meetings are already in type, and progress has been made with the remaining matter. In spite, however, of some reduction in the price of paper, owing to the cost of printing, as regards both labour and material, the book must still be of a limited size, and we shall have to be very chary in the introduction of illustrations.

Volume XLIII will contain the Presidential Address which we have listened to this morning with so much interest and appreciation; the Authorised Reports of the Proceedings at the Summer Excursions and at the Winter Meetings; Papers on "The Black Death in Dorset," by the Editor; on "Dorset Church Woodwork," by Mr. E. T Long; "The Case for an Anglo-Saxon Mint at Bridport," br Mr. Henry Symonds, F.S.A.; on "Whitcombe Church," by the Rev. M. Persse Maturin; on "The Priest's Cell, discovered during the alterations to the Bridge, Lyme Regis," by Dr. Wyatt Wingrove; on "Ancient Stained Glass in Dorset Churches," by Mr. E. T. Long; together with a "Catalogue of the Dorset Deeds

recently presented to the Club," which has, at the request of the Executive, been very kindly prepared by Mr. H. Symonds. The Volume will also contain the usual Rainfall Reports and the Tables and Phenological Notes which have been prepared by the respective Editors of those Sections. Through the kindness of "The National Trust for Places of Historic Interest," &c., who have lent us the block, we shall be able to give an illustration of the Cerne Giant, which we are thankful to know has, within recent years, been handed over to the care of the Trust. I understand, too, that it is the wish of the Executive that the excellent Treatise by Dr. F. H. Haines on "The distribution of any one Order of Insects in Dorset, with suggestions as to the limiting causes," to which the Mansel Pleydell Medal and Prize of £10 have been awarded, should be printed in this volume. It is hoped that, with this varied list of contents, the Record of our proceedings for 1922 will not be deficient in interest.

DORSET PHOTOGRAPHIC SURVEY. MR. C. J. CORNISH-BROWNE, Hon. Director of the Survey, reported as follows:—

There has been very little to record for the past twelve months: 67 photographs on 55 mounts have been added to the Collection. The expenses have been practically nil, as the mounts were from stock in hand. Those who kindly help me in certain parts of the County have found the same want of interest among amateur photographers as I have myself; I think some are frightened by the very name—Photographic Survey! Photographic Record would have made a wider appeal; and others of of course hesitate to increase their photography expenses; but, as I have pointed out before, the further success of the Survey largely lies with the Members of the Field Club, who have it in their hands to make it known to their photographing friend and to put them in touch either with myself or with any Member of the Committee.

The President expressed the thanks of the Club to Mr. Cornish-Browne for his valued services as Director of the Survey.

In the absence of Captain Acland, the following Notes on Acquisitions to the Dorset County Museum, May, 1921, to May, 1922, were read by the Hon. Secretary:—

The most interesting acquisitions during the past twelve months have been already brought to the notice of the Dorset Field Club at the Winter Meetings; but for the sake of continuity in the Volumes of *Proceedings*, it will be well to refer to them once more in the Annual Report which I am allowed to make.

At the meeting on 6th December, 1921, a selection from our new collection of *Differa* was exhibited. It was made originally by the President, and has now, with infinite care and skill, been arranged in a cabinet of twenty drawers and named by Dr. Haines, of Winfrith, who has also added many specimens of his own. This collection of "Twowinged flies" is therefore the united gift of Mr. Richardson and Dr. Haines, and is a valuable acquisition for the Museum.

At the meeting in February, 1922, Mr. W. de C. Prideaux exhibited, and presented to the Museum, the fragment of the original brass from the canopied tomb of John Morton and Lucy his wife, in the Church of Milborne St. Andrew, Dorset, dated 16th January, 1526. This fragment was recovered by Mr. Wallis Cash, of Wincanton, after it had been lost from the Church, and was obtained for the Museum through the good offices of Mr. Mill Stephenson, F.S.A. Mr. Prideaux has fixed the portion of ancient brass to a wood back, and added a rubbing of the complete brass now in the church, which appears to be a most accurate reproduction of the old lettering. The inscription runs, "Here lyeth John Morton, esquyre son of Richard Morton and Luce his wife which John decessed the XXVI day of January the XVIII yere of the rayne of King Henrye the VIII on whose soul Jh'u have m'cy." It is given in full in all three editions of Hutchins' History of Dorset.*

At the same meeting I exhibited about thirty pieces of Amber found 15 years ago in the clay-pits at Corfe Mullen which belonged to Mr. Blaney. The chief interest in connection with this discovery was that the British Museum authorities said they had never heard previously of Amber being found in Dorset, though often seen on the East Coast washed up from the sca. Moreover Corfe Mullen is five miles from the sea, and the Amber was found at a depth of 40ft., lying between two different kinds of clay. It would be difficult to say whether this Amber was produced originally in the same region as that in which it was found, or whether the whole bed of clay had been carried in from an old shore line.

· The Amber is at present in the Museum (Case I) as a loan from Miss Blaney of Lytchett Matrayers.

The most important addition to the Museum Library is the M.S. Collection of Dorset Wills, Depositions, Suits, and Musters, and the Key to Chancery Records made by the late Mr. F. J. Pope, it being expressly stated in his will, "that they are presented to the Dorset County Museum so that they may in future be available for public reference." Mr. Pope devoted many years of his life to the compilation of this important work, contained in 25 bound volumes, and 19 smaller books, which may be examined for the purpose stated, on application to the Curator, or to the Museum attendant under the same rules and conditions as are in force for the collection of "Dorset Deeds" presented to the Field Club, by Mr. A. E. Fry, in 1909, and recorded in Volume XXXII of our Proceedings.

^{*} Vol. II, page 600, of the 3rd edition.

THE REPORT OF THE EARTHWORKS SECTIONAL COMMITTEE was presented by Mr. C. S. Prideaux, who said:—

Just after the last May Meeting it was brought to the notice of the Committee that a portion of the circular walling of a Round Barrow was being removed owing to the projecting stones breaking the ploughshares. The owners, agent, and tenant were at once communicated with, and, owing to their kind co-operation, the holes have been filled in.

The Marsden Collection of Palæoliths will, I hope, be in the Museum very shortly. The case is finished, and most of the specimens arranged.

Although strictly speaking outside the scope of the Committee, it is worthy of note that the Roman Aqueduct, parts of which are named "British Settlement," &c., "British Camp," &c., in the Ordnance Map, has gained new interest owing to discoveries made by Major Foster, a visitor to this town. He has written an exceedingly interesting and, I think, valuable paper on the subject; and I hope to get some short reports in connection with the paper from Dr. Cyril Day, Mr. Ronald Good, B.A., and others on the geological and botanical parts of the paper.

PRESENTATION OF MANSEL-PLEYDELL MEDAL AND PRIZE. The Medal and Prize have been awarded to Dr. F. H. Haines, M.R.C.S., L.R.C.P., of Brookside, Winfrith, for the best paper on The distribution of any one Order of Insects in Dorsel, with suggestions as to the limiting causes.

Captain Elwes, who, as one of the original trustees of the Mansel-Pleydell and Cecil Medals, had been deputed to make the presentation, said that he felt it to be a great honour and pleasure to present the medal and prize to Dr. Haines, whom he had known as an acute observer and a very complete naturalist.

MR. NELSON M. RICHARDSON stated that Dr. Haines had written a most valuable, interesting, and scientific paper; and up to the present there was nothing like it in the *Proceedings*. The trustees were quite unanimous, not only in awarding the medal and prize to Dr. Haines, but also in thinking that it was an exceptionally good essay. A creditable essay was also sent in by Mr. Pearce, formerly of Sherborne School and now at Cambridge, his subject being "Beetles and Colyoptera." Dr. Haines tendered his thanks for the great honour that had been conferred on him, and also for the kindly words that had been spoken.

RE-ELECTION OF THE PRESIDENT. CAPTAIN ELWES said that after the address they had heard that day, together with those delivered in previous years, it was evident that they could not possibly have a better President than Mr. Richardson; and it was with great pleasure that he proposed his re-election. This was seconded in all parts of the room and carried unanimously. The President thanked the members for the honour that they had again paid him.

RESIGNATION OF THE REV. H. PENTIN AND ELECTION OF NEW HON, SECRETARY. Before proceeding to the election of an Hon. Secretary, the Rev. H. Pentin said that for the last 18 years he had held the office, and he wanted the members now to give him a rest. When the war started he asked to be allowed to lay down the office, but as the duties became light he carried on, and at the close of the war he felt that he could not leave the club in low water. He desired to continue until the club was up to its pre-war position, and they could practically say that this had now been reached. In giving up an office which he had held with great happiness for 18 years, he thanked very much the President and all the officers and members for their valued help and kindness to him. not think that during that period anyone had ever said an unkind word to him, which spoke well for the club, and he hoped that he had never spoken an unkind word to, or thought unkindly of anybody. He was not going to give up his connection with the club, and he hoped to attend the summer meetings that would be arranged by somebody else.

The President said that, before proceeding to the election of a new Hon Secretary, he desired to express the thanks of the members to Mr. Pentin for all that he had done for the club during the past 18 years. His had been quite the longest term of secretaryship that anyone had had in the club. They were very grateful to him for all the time and trouble that he had taken, and he formally proposed a vote of thanks to him for all his goodness. Dr. Haines seconded. The Rev. H. Pentin expressed his appreciation of the kind words which

had been said, and then proposed that Mr. C. J. Cornish-Browne should be the new Hon. Secretary. Mr. A. E. D. PRIDEAUX seconded the proposition. The PRESIDENT, in supporting it, said he was sure that Mr. Cornish-Browne would make an excellent secretary. Mr. Cornish-Browne returned thanks for his unanimous election, and assured the club that he would carry out the duties to the best of his ability.

ELECTION OF OFFICERS AND COMMITTEES. The following were unanimously re-appointed:—Hon. Treasurer, Captain J. E. Acland; Hon. Editor, Canon Fletcher; Hon. Editor of the Phenological Report, Rev. F. L. Blathwayt; Hon. Editor of the Rainfall Report, Rev. H. H. Tilney Bassett; Director of the Dorset Photographic Survey, Mr. C. J. Cornish-Browne; Delegates to the Congress of Archæological Societies, His Honour Judge Udall and Canon J. C. M. Mansel-Pleydell; Delegates to the Corresponding Societies' Meetings of the British Association, Sir Daniel Morris, K.C.M.G., D.Sc., D.C.L., F.L.S., and Mr. Alfred Pope, F.S.A.

Mr. Harry Pouncy, who has so ably filled the post of Assistant Secretary since 1902, at the request of Mr. Cornish-Browne consented to continue to act in the same capacity.

VICE-PRESIDENTS. The twelve existing Vice-Presidents were re-appointed by the President, and the retiring Hon. Secretary, Rev. Herbert Pentin, was added to their number. In accordance with Rule 2, Mr. Cornish-Browne, as Hon. Secretary of the Club, becomes *ex-officio* a Vice-President.

SUMMER MEETINGS. It was decided to hold four one-day meetings during the summer, and no less than eighteen districts had been suggested beforehand. On a ballot being taken the four following were chosen:— Edington, St. Aldhelm's Head and Worth Matravers, the New Forest, and Christchurch Priory with Highcliffe Castle,

Dorset Field Club.

SUMMER MEETINGS ACCOUNT, 1921.

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HERBERT PENTIN,
Hon. Secretary,
2nd May, 1922.

Dorset Matural History and Antiquarian Field Club.

TREASURER'S ACCOUNT FOR THE YEAR ENDING DECEMBER 31ST, 1921.

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JOHN E. ACLAND,

Hon. Treasurer.

We certify that we have examined the foregoing statement of account, and find the same correct. March 16th, 1922.

EDWARDS & EDWARDS, Incorporated Accountants,

Cornhill Chambers, Dorchester.



Anniversary Address of the President.

By NELSON MOORE RICHARDSON, Esq., B.A.

(Read May 2nd, 1922).



DEEPLY regret to have to begin this my eighteenth Annual Address with a reference to our great loss in the death of Lord Eustace Cecil, the second President of our Club and my

immediate predecessor in that office. Not only while he held that position, but at all other times, he has taken the greatest interest in the welfare of the Club and been of great service to it in many ways. His name will always be associated with the Cecil Medal, awarded biennially, together with a prize of £10, for the best essay on some subject in Chemistry or Electricity by a native of or resident in Dorset. This medal and prize were founded by him in 1904; and he was also chiefly instrumental in the institution of the Mansel-Pleydell Medal and Prize which are to be presented to-day. I do not say more, as a fuller account, together with a portrait, is printed in our last volume of Proceedings. (Proceedings D.F.C. XLII, lix.) I am glad to say that the name of Cecil is still on our list of members in the person of The Hon. Lady Cecil, the talented Authoress of "A History of Gardening in England," and other works.

We also mourn the loss of another prominent member of our Club, Dr. Huyshe Wolcot Yeatman-Biggs, Bishop of Coventry, who joined in 1892. I remember him well at the meeting at Swanage when he was elected, very shortly after he had become Bishop of Southwark, when his health was proposed by Mr. Mansel-Pleydell, who was then President, as well as those of two other distinguished visitors, Lord Rayleigh and Mr. Hudleston. Until lately the Bishop of Coventry had not been living in Dorset, but since he has done so he has attended our meetings and taken great interest in the work of the Club; and I had looked forward to a continuance of the kind help which he was always ready to give me in difficulties, which, even in our pacific and well ordered club, will occasionally arise. He was much interested in all archæological matters, and kept a watchful eye on socalled restorations of churches in his diocese. He was, like myself, an old Wykehamist. We also regret the loss of Dr. William Hawkins, who joined our ranks in 1894 and has always been closely connected with the Club and a frequent attendant at its meetings. He lived for many years at Abbotsbury, where he retired shortly before his death. He took great interest in that village and its wonderful archæological remains, and his knowledge has been of great service to us at our meetings in that locality.

It is very sad to feel that so many of one's older kind friends, like the three I have mentioned, have gone from us, though I am glad to say that many are still left, and we have many newer ones. I regret that I have also on my list of members who have passed away in the last twelve months the names of the Rev. J. G. Brymer, who joined in 1895, and Mr. J. L. Marsh, in 1904. Since writing the above I regret to have to record the death in Syria of Mr. E. R. Billington, who, though he only became a member in 1920, was most interested in our work and energetic in anything that he undertook, having on a recent visit to Syria explored and dug caves and brought back numerous interesting prehistoric animal and other remains. He had hoped to have continued his investigations on this visit.

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ZOOLOGY.

It has for some time been known that rats are a great means of spreading plague in India and elsewhere, through the fleas they carry. It is now found that shrews are also responsible, in the same manner. It is stated that the mosquito, *Anopheles maculipennis*, the carrier of malaria farther South, is abundant in Denmark, but there rarely attacks man, feeding in preference on the blood of animals, thus accounting for the disappearance of malaria in that country. This species also occurs locally in England, but whether it is known here to attack man I am not aware. The last epidemic of malaria in Denmark was in 1831.

A munificent prize of £10,000 has been offered for the discovery of a non-surgical cure of cancer, a disease of which the cause is still unknown, and it is to be hoped that some better result may be forthcoming than has been the case hitherto from the large sums that have been spent in investigating this scourge. I think however that it is a pity that any restriction is placed upon the status of the discoverer, who might be in the position of Benjamin Jesty of this county, who had much to do with the discovery of vaccination. Naturalists at present seem much divided in their ideas about the origin of species, and Darwin's theory of Natural Selection and survival of the fittest is discredited in many quarters. The production of a new species by the crossing of two old ones seems to find favour, and there are various other theories. My own idea is that all these probably play their part in modifying the fauna and flora of the globe, but that we must in any case start with creation, however much the animals and plants may alter in the course of time, from their environment and other causes. The question of the inheritance of characters acquired by the parent during its lifetime is another bone of contention, and has been for generations, but there seems to be evidence of its occurrence. always struck me that many of the habits of domestic animals which are not natural to their wild relatives and were probably not so to their own ancestors, must have arisen in

this way. For instance, it is very few domestic cats that will kill chickens though for other birds they have no mercy. They get no special training, and I do not think it is caused by the defence of the mother hen, for the hens are not always present, nor by the survival of the fittest, by the chickendestroying cats being drowned or otherwise made away with. Nor do I think that there is any special education in this respect by the mother cat, but it seems as if some of their ancestors had been taught by punishment or otherwise that chickens were sacred and their descendants had inherited the habit. It has been much urged that an attempt should be made to discover for what walks in life children at school are most fitted, so that they might be put into the position best suited to their tastes and powers, but the difficulties seem great, for in my small experience the desires of a child as regards his future are in most cases very variable, though there are of course exceptions, which are most constant, and should be attended to if possible. A child who shews promise should be cultivated, but I do not think that the general elaborate education of the present day tends either to the good of the country or the welfare and happiness of the individual.

To turn to the more strictly zoological portion of my Address and beginning with the lowest Animals, I note that a work has been published on the free living unarmoured Dinoflagellata, a group of minute marine organisms which occur in vast multitudes and are often brilliantly coloured, and are responsible to a great extent for the red coloured seas which sometimes extend for 100 miles, and for luminescence. They are however, from their frailty, very difficult to examine under the microscope, as their delicate bodies undergo disruption almost immediately and it is only by the exercise of great speed and care after capture that this difficulty can be overcome. These afford food to many fishes which also feed indiscriminately on the plankton, or masses of mixed forms of small animal life, which inhabit the ocean. In this connection it has been observed by divers below the surface,

that these small forms stand out much more clearly, when seen against some large opaque object, such as a ship's hull and it is thought that this may probably be the cause of the attraction which such objects have for fish, which usually congregate in such positions. It has also been observed that mackerel make distinct jumps in different directions at the plankton surrounding them, as if they were choosing the individuals that they most fancied, in which case the background of the ship would be of great assistance. artificially-aided pearls if I may so call them, which have recently been put upon the market, are produced by grafting in a pearl oyster a small spherical piece of mother-of-pearl as a nucleus wrapped in a piece of the shell-secreting epidermis from another pearl oyster. Pearly matter is deposited on the nucleus, and in the course of a few years a fine pearl is produced, which is indistinguishable from a natural pearl, except by cutting it in half or making the presence of the nucleus; visible by polarised light; and it is considered that even these tests can be rendered futile by using a small pearl as a nucleus, in which case the artificially-aided pearls will apparently be indistinguishable from those naturally produced by the same race of pearl oyster, a very serious consideration for those who possess these valuable gems. It would seem that there is a slight difference between Japanese and Indian pearls, so that they can be distinguished, especially with the aid of ultra violet light, which is an excellent means also for distinguishing real gems from imitations, as under it most gems fluoresce whilst the imitations do not. No difference can however be perceived in this way between the natural pearls and the artificially aided ones, both produced by the Japanese oyster.

From a British Association Report it would seem that there are three distinct bee diseases which usually pass as the Isle of Wight bee disease, the commonest of which is that caused by mites, of which I spoke in my last Address. Another species of mite (in Canada at all events) preys upon the common mussel scale and has been imported into orchards with that view. A British Museum pamphlet recommends for

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the destruction of cockroaches a powder consisting of three parts of sodium fluoride to one part of pyrethrum, to be scattered about their haunts in the evening. It is said to be harmless to domestic animals, but I am glad to say that I have no opportunity of testing its efficacy! It is also stated by the United States Department of Agriculture that a temperature of 118° to 125° Fah, is sufficient to kill all flour-mill pests, and it may be presumed that practically no insects would survive I should think however, that it would have to be applied for some time. Mention is made of certain Indian dragonflies flying by night, an unexpected habit, though I have occasionally, but rarely, seen butterflies doing the same thing. It is of course possible that something may have disturbed them. A very archaic form of dragonfly of the genus Epiophlebia has been discovered in the Himalayas. This genus has been hitherto known by a single species from Japan. The death of a very large Seychelles tortoise is reported from the South African Museum. It had reached a gigantic size in 1834, but its age is unknown. Another was very large 80 years ago and still flourishes. The common European fresh water eel (Anguilla vulgaris) is believed to breed only in the Western Atlantic, S.E. of Bermuda, the larvæ being carried towards Europe by the Atlantic current. The Dana Expedition found that they passed, in the Leptocephalus stage, through the straits of Gibraltar, whilst the larvæ of some other species of eel were only found to the West of the Straits. The plaice in the North Sea which had been decreasing in numbers up to 1914, have largely increased during the War, owing to the limited amount of fishing, and the question of restriction of some sort is being considered. Many complaints have been made of the tarred roads, which are most dangerous to horses on account of their slipperiness. I have found india-rubber pads (easily removable) very useful in this respect. The first washings from these roads are poisonous to fish unless much diluted, but the later ones less so.

Amongst birds the most wonderful event is the production of a kinematograph film shewing a Cuckoo coming and laying her 1

egg in a meadow pipit's nest. Another depicts the young cuckoo turning out a young pipit from the nest. In a recent monograph on Pheasants, the writer after a careful study of 35 so-called species in the same locality comes to the conclusion that only nine merit specific rank, the other 26 forms being hybrids. In this group there appears generally to be a great deal of hybridisation, the hybrids I presume being fertile. The Oxford Expedition to Spitzbergen last year has added much to our knowledge of the birds of that country and their eggs and habits. The nesting of various geese, ducks and other birds which use these northern regions for this purpose, was observed and good series of skins and eggs obtained. A collection of mammals, birds and reptiles from New Guinea has been added to the Zoological Gardens, including four birds of Paradise. I was much interested when in London in March, in watching these and other birds of Paradise, of which they have about six species, but unfortunately they were all more or less out of plumage through moulting. The females are all rather insignificant brown birds, and have none of the splendid plumes of the males. The Lesser Bird of Paradise, a very handsome bird with long tail plumes, makes a succession of loud and very harsh screams and the voices of the others are almost as unmelodious. consists of fruit and insects, and I saw this bird take a grape from its dish, hold it with one toe on the perch and carefully pick out the stones with its bill and drop them. then swallowed the grape whole with some little difficulty. Having a small collection of several species of these beautiful birds. I was anxious to observe them in life.

In 1910, the University of Aberdeen started a system of marking birds with a view to obtaining information about their migration. Of 27,802 birds so marked, belonging to about 100 species, 879 have been recaptured, and a Report on the knowledge thus acquired has lately been issued. The migration of some swallows to S.E. Africa has now been definitely established by the capture of five specimens marked in different parts of Great Britain, but it has yet to be shewn

whether any ever return from there to this country. Many instances are on record of the return of marked swallows to the same neighbourhood, but the place of their migration is unknown. It would seem that swallows were generally very scarce last year, and this was the experience in my neighbourhood, whereas they were abundant in the previous year. A sad story is told of Lord Howe Island which contained a great variety of interesting birds, but no mammals or reptiles, and had been set apart as an ornithological sanctuary. Unfortunately rats were accidentally introduced, with the result that a birds' paradise of two years ago was, as the Report says, reduced to a veritable wilderness beyond all hope of recovery. The importation into this country of the plumage of birds, with certain exceptions, is now prohibited, but now that the female sex has succeeded in usurping what used to be the prerogatives of man to such an extent, it will probably also despise such head ornaments, and render the Act a dead letter!

BOTANY AND AGRICULTURE.

The manufacture of various industrial products by means of moulds and other low forms of life has advanced much of late years, and many substances are now made more easily and cheaply by fermentative processes, such as glycerine and citric and other acids from sugar. These methods shew a probability of large future development. Some of my audience may remember that in 1906 (Proceedings D.F.C., XXVII, xxxii) I exhibited some specimens of mortar from a wall at Abbotsbury shewing the origin of the curious series of ridges and furrows which follow more or less the outline of the lumps of mortar in the interstices of old walls between the They shewed how the mortar from shrinkage in setting and drying developed minute cracks, in which the spores of moss lodged and formed at first very thin lines of The roots of this moss gradually disintegrated the sides of the cracks, causing the lines of moss to become wider, until a certain width being reached there was not sufficient roothold for the now substantial band of moss, which would curl up and fall out when dry, leaving the characteristic

furrows which one sees. This effect has been ascribed to the movement of the particles of lime from the furrows to the ridges by some natural cause, but I am not aware that there is any evidence that this takes place, and I have been unable to find, on testing, any difference in the proportion of lime in the ridges and in the general body of the mortar. I refer to this as I have been interested to see it stated lately that the mechanical action of lichens on stained glass windows has been found to corrode them, and also that plant roots eat into the surface of polished marble. In some cases however a thin covering of turf is a great protection, as I have found the lettering on gravestones far better preserved when so covered than when exposed. I cannot however identify the sort of stone—it was not marble. Some experiments have been made of growing liverworts submerged in water. Great modifications were produced, to such an extent that had they been found in a state of nature, they would have been described as a new species. The Douglas fir which has been much planted in this country on account of its quick-growing qualities, has lately been found to be attacked by a woolly aphis (Chermes cooleyi, in the south and a new species of fungus (Phomopsis pseudosugae) in the north, both of which threaten serious damage. The growing scarcity and price of timber and the great demand for it during the war led to serious steps being taken on the part of the State to plant suitable tracts with useful trees, and this policy is being satisfactorily carried out, about 8,000 more acres having been planted last year. It seems important in planting, to keep to the former orientation of the tree, as it has been found that when the sides of the tree were made to face in the same direction as before transplantation the loss was greatly reduced. The growing of potatoes instead of wheat is being advised in some quarters at present, on the ground that much more food can be produced in the same area—five times as much I have seen stated—and also on the ground that potatoes are a more certain crop. I think it would be difficult to satisfy the nation with potatoes instead of bread, and as to certainty of crop, my small experience has shewn great variations in different seasons. Pigs and potatoes have been recommended for war-time food, but anyone who kept pigs during the late war must have suffered from the difficulty of procuring food for them as well as the very bad quality of what he did manage to obtain. There are said to be about 2,000 varieties of wheat. Probably many of them are very closely allied, but no probable wild ancestor of the bread-wheats is known. From experiments at Rothamsted it would seem that, on the whole, farmyard manure is the best fertilizer, though some artificial manures are near rivals when By adding certain ammonia the former cannot be obtained. salts to straw, a very good artificial farmyard manure is said to be produced. In an account of the Yale Peruvian Expedition of 1911, recently published, it is stated that potatoes, small and bitter, but edible, and a variety of maize grow up to 17,400 feet, on the snow line, where they endure repeated frosts. What is said to be the highest human habitation in the world was also met with at this elevation. In the Report of the Botanical Society and Exchange Club it is stated that a Vetch (Vicia lavigata) which formerly occurred near the shore at Weymouth and Portland, has not been recorded for nearly 100 years and may be extinct in Britain. It is curious that only about six flowering plants have shared this fate since 1597, the date of Gerarde's Herbal, though there have been numerous introductions.

GEOLOGY.

A full report has now been published of the great earth-quake, which I alluded to a year ago, which took place on December 16th, 1920, and was recorded in many seismographs, but the locality of which was for a time uncertain, a variety of countries being suggested. The earthquake was of great magnitude, and took place in the N.W. of China, covering a district of 8,000 square miles. The first violent shock lasted for three minutes with terrible effect, causing a loss of probably 180,000 lives or one-third of the population. Fissures opened and swallowed up houses, and avalanches and crumbling hills buried the surface of the land. It is believed to have been

the greatest earthquake in recent times. Other earthquakes took place in Ethiopia on August 15th, 1921; in Jamaica on November 25th; and in California on January 31st, 1922, but all of secondary importance. Small movements of the earth are almost continuously shewn on the seismograph and it has been found by examining a ten years record that these reach a maximum in January or February, and a minimum in July. There are also diurnal and semi-diurnal variations. mapping-out of a great earthquake rift, which runs down California for a distance of 600 miles or more, has been done by photography from aeroplane, the features being shown with great distinctness, especially in the desert region. Along this rift many earthquakes, including the great one of 1906. which destroyed San Francisco, and the one mentioned above, have originated. At the last British Association Meeting an interesting discussion took place between several sections on the Age of the Earth. Deductions from radio-activity, which has brought into the argument an entirely new and upsetting feature, have increased the estimate from twenty or a hundred millions of years to no less than a thousand millions or more. But all these estimates seem to involve rather rash assumptions. One of the smaller ones assumes that the sea was originally fresh and calculates the time it may have taken to acquire its present saltness by denudation carrying salt down from the rocks containing it. The radio-active estimate is based on the time taken by uranium to turn into the lead isotope which is found in company with it in certain rocks and from which it is supposed to be derived, but I do not quite understand why, if this is the case, all the uranium has not been transformed into lead, unless it be that it has been gradually developed out of some other so-called element during that long period. But the geological age of the earth seems still to be surrounded with obscurity. The microscope has lately been found very useful in discriminating between different classes of coal. suitable for different purposes, by the examination of very This cannot so well be ascertained chemically, thin sections. as varieties having practically the same composition have very different burning qualities. Petroleum in the Himalayas generally occurs in connection with beds of nummulites, vast masses of rock being composed of these small fossils, and it is thought that it may have arisen from their decay. sources of radium are about to be developed in this country, one a newly discovered deposit of pitchblende in North Devon. the other a re-opened uranium mine in Cornwall. Turning to fossils, the first Palæozoic land-plants have lately been discovered in Japan, though preserved in marine Carboniferous strata. Our member Dr. Haines has described some new species of fossil *Tipulidæ* (better known as Daddy-long-legs) from the Isle of Wight. The anterior portion of a Plesiosaurus has for the first time been discovered in a freshwater bed, the Wealden in Sussex, shewing a probability that it lived in a fresh-water lake or river. It is a small specimen and would measure about six feet in length. It resembles the early Jurassic forms more than those of later date in the structure of the shoulder girdle. A new Dinosaur, Brachyceratops, from Montana, has two stumpy horns, and a bony frill extending backwards. In a Miocene bed in Palencia. Old Castile, have been found the remains of a number of gigantic tortoises, about five feet in diameter, resembling those now living in the Galapagos Islands, but larger, which seem to have been entombed in the sand of a river by a sudden Investigations on Mount Kosciusko, the highest peak in Australia, have shewn that its summit was formerly covered by glaciers in the time of the giant Marsupials whose remains have occurred in the S.E. part of that continent.

ASTRONOMY.

One of the astronomical features of the year is the total eclipse of the Sun on September 21st next, which will be well placed for observation, as the line of totality extends from N.E. Africa to Queensland, passing through several suitable stations. Expeditions have been planned and are being carried out, a British one occupying Christmas Island in the neighbourhood of Sumatra, where it commences operations

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six months beforehand. The prospect of good weather is best in N.W. Australia, which is tenanted by observers from Lick Observatory, California, and there are also several others. so that the chances of success at one or more stations are great. A bright object was observed near the sun on August 7th last, which it is thought may have been a comet or possibly a very bright new star, but its nature is uncertain and the appearance did not last long. The Perseid Meteors were seen in rather unusual numbers on August 11th. two observers having noted about 130 meteors in 21 hours, including a good proportion of the size of first magnitude stars or larger. Another noted 62 in 15 minutes. Richardson and I counted 44 meteors in the half-hour from 12.40 to 1.10 a.m., all, except perhaps one, appearing to come from the neighbourhood of Perseus, two with hardly any length of path being near the bright stars of that constellation, but in the direction of Ursa Major. Most were small, but three or four were equal to first magnitude stars. I saw 11 more, including two bright ones, between 1.30 and 1.45 a.m., but they then seemed to be diminishing in numbers. Many left slight but transient trails. Two very fine meteors were seen on the same night at Bristol and elsewhere. August 15th, several dates in September, October 6th. December 4th, 11th, 20th and 23rd, January 11th, and one on February 7th in sunlight, which made at least two detonations in passing. Nothing was seen of the Pons-Winnecke shower which was much written about in the papers and expected in the end of June. The shower of June 16th, 1916, is the only example of one from this radiant. Much research has lately been made on star motions, and those of a large number have been measured, with the result that 76 between the 6th and 13th magnitudes have been found to have an annual proper motion of more than two seconds and a far larger number a tenth of that amount. The angular diameters of many stars have also been measured by means of the interferometer, a delicate instrument in which the star is viewed through two fine slits, the interference fringes which are produced disappearing when the slits are at a certain distance apart, depending on the diameter of the star. About 200 star-parallaxes are being determined annually at the Mount Wilson observatory. total amount of starlight has been estimated as that which would be produced by 1,440 stars of the first magnitude. Movements in spiral nebulæ have been demonstrated by means of photographs taken at long intervals, and in two cases the times of revolution round the nucleus have been calculated to be 85,000 and 160,000 years respectively. It seems probable that nebulæ exist which give out no light to us, this is thought likely from the fact that blank dark spaces occur, especially one in a bright nebula in Orion dividing it in a way not otherwise accounted for. A very large reflecting telescope of 60 inches in diameter is likely to be set up shortly which was made about 30 years ago and bought by the Harvard Observatory in 1902. It is exceeded in size by only two instruments, the 100 inch, at Mount Wilson in California, and the 72 inch at Victoria, British Columbia.

METEOROLOGY.

The great feature of the year 1921, meteorologically speaking, has been the extreme dryness, the general rainfall in England and Wales having been less, so far as can be ascertained, than in any year since 1788, and in the S.E. of England for even longer. The least deviation from the normal occurred on the The barometric conditions favourable to N.W. coast. prolonged droughts are said to be high pressure over the British Isles combined with low pressure over Spitsbergen and the Arctic regions, and, generally, low pressure over the Tropics. At Greenwich the rainfall was only 51 per cent. of the average for 100 years and less than any previous record. About the same proportion held over the south of England. The only part where the fall slightly exceeded the average was in the north and west of Scotland, whilst in the east of Scotland, the north of Ireland and the N.W. of England it was about 87 per cent. In Dorset the fall was small. own record at Montevideo near Weymouth was 15:25 inches, which is little more than half the average for 18 years, viz. 29.63 inches. The drought would appear to have been

chiefly European, most other parts of the world having had their usual supply of rain. A very important feature in connection with this drought is the effect on underground springs, which is probably not obvious for a considerable time afterwards, when it may seriously affect the water supply. At Rothamsted notes are kept of the amount of drainage from the surface at certain depths. This amount (taking the average for 50 years), does not vary very much at the depths of 20, 40 and 60 inches below the surface, being about 15 inches for each depth. But in 1921 it was less than 6 inches. owing to the greater evaporation of the small quantities of rain and the long intervals of drought. If the springs only get two-fifths of their usual amount, it seems to be a bad prospect for the water supply in the following period, though I must say that I have not yet heard of any really serious deficiency since January. From experience in the War and otherwise, I gather that the belief that explosions will produce rain is now looked upon as a fallacy. It may have been founded on the simultaneous occurrence of thunder and thunder-showers. With the dry weather the mean temperature of the year was high, being 2.7° Fah, above the normal at Greenwich, the highest record since 1841. October 6th, 1921, was the warmest day of that date on record and no less than 6° above any previous 6th of October on which the temperature Comparisons of underground temperatures was measured. in oil wells in America at different depths show that the temperature increases at a faster rate the deeper we descend, thus, in one well the rate, taking the whole 7,310 feet, is 1° in 70 feet, but from 4,000 feet to the bottom it is 1° for every Ascending in the atmosphere, which has been penetrated by balloons with self-recording instruments to a height of 20 miles, it is found that in the first seven miles, called the troposphere, the temperature diminishes at about 6° for each kilometre until -55° is reached. In the next layer of unknown thickness, called the stratosphere, water vapour is absent, and the temperature is constant. At higher levels the gases are said to arrange themselves in layers according to their density, with helium and hydrogen, being the lightest. above a height of 60 miles. The heights of Auroræ have been measured up to 607 kilometres, making it probable that there is a sensible atmosphere at that great elevation. The South of England was visited on the night of March 7—8 by a gale of unusual violence, which attained at one time at the Scilly Islands the speed of 108 miles an hour. This record has only once been exceeded in the British Isles in a gale on January 27th, 1920, when a speed of 110 miles an hour was registered in Co. Clare, Ireland.

ELECTRICITY.

A magnetic storm of an unusually severe and protracted nature took place in May, 1921, lasting from the 13th to the 17th of that month, the extreme maximum being reached on the night of May 14th, though much oscillation took place both before and after, the effects being violent on May 13th and 16th for It is compared with a somewhat similar storm some hours. which began on November 11th, 1882, and lasted for about ten days. Auroral displays were seen at Cambridge, London, and elsewhere in the South of England. These storms are believed to have an association with sunspots, and in the present instance there was a large group of spots near the sun's equator, an unusual position, so much so indeed, that it is the largest group of spots which has been recorded in a similar position during the past 50 years, the larger groups generally lying further north or south on the sun's disc. most powerful Radio station yet built was opened at New York on November 5th, when messages were sent to all the large Radio stations, in the world and received in Great Britain, France, Norway, Australia and elsewhere. When completed, the station and its radiating antennæ set on towers 400 feet high, will cover an area of ten square miles and be capable of transmitting 100 words per minute. It is proposed to establish a series of wireless stations, at distances not greater than 2,000 miles, between England and Australia, the intermediate stations being at Cairo, Poonah, Singapore and Hong Kong. instances of the occurrence of globular lightning are not very common. One was recorded on June 26th, during a thunderstorm, at St. John's Wood, in the form of a large incandescent mass floating in the air below the clouds and apparently stationary for some minutes. I remember that my father used to describe a phenomenon of this sort which he saw when a boy, probably about 1830, when out on an exposed hill side in a thunderstorm. Two small balls of fire, about the size of an orange appeared, not far above the ground, rotating round each other and advancing slowly at the same time. He was near an iron paling but whether that had any effect on the phenomenon I cannot say. He watched them till they passed out of sight. Another case which may perhaps have been a meteor, but sounds more like globular lightning, was furnished to me by my gardener, Thomas Isaac, who, on January 30th last at about 7-30 a.m., saw a ball of fire, apparently about the size of his two fists, come out of the clouds and move away in a North-westerly direction till it was lost to view behind a shed near which he was standing. No noise was heard. There was no thunder that day, but there were sudden and heavy falls of rain, as in a thunderstorm, and the clouds may have been highly charged with electricity. From various accounts these balls seem often to be wafted by the wind and frequently end by exploding.

CHEMISTRY.

A good deal of discussion has been going on lately as to the use of the term chemist, which should properly be applied only to those who study chemistry scientifically, and not to those tradesmen who dispense and sell drugs, whose more correct appellation is pharmacist or druggist. Custom is however probably too strong to admit of any alteration, and the only way out of the difficulty will, I think, be to find a new name for the scientists. In my last Address I spoke of the now received views of the constitution of atoms, which are considered to be built up of atoms of helium or hydrogen and electrons. It is found that the force required to disintegrate these parts of an atom is enormous, considering the very minute size of

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the thing operated on, and if some day the forces which hold them together should be brought under control, we should have in our hands a power, which would far exceed anything at present known. It is, on the whole, to be hoped that our knowledge may never extend so far, as the power of destruction would be unlimited! Until lately it has always been believed that the presence of pyrites was the cause of spontaneous combustion in coal mines, but it has been lately shewn by experiments that coal itself will absorb oxygen, and. when it does so to the extent of about ten per cent., it is very liable to heat and take fire without pyrites being present; Also that the heat developed by pyrites is comparatively negligible. At the same time pyrites may disintegrate the coal round it and make it more accessible to the air and in this manner help forward the combustion. Spontaneous ignition sometimes takes place in peaty soils in India, if they become very dry in a hot season; and a case has been observed in Berkshire where the peat was burning below the surface. It is suggested that this may sometimes be the origin of heath It has been found that helium gas, which is nearly as light as hydrogen and not combustible, is present in the natural gas which occurs in N. America in large quantities, and during the war, it was produced for use in airships at the rate of 5,000 cubic feet a day. This is and no doubt will be taken advantage of for commercial airship purposes, as it takes away a very serious element of danger from their use. perishing of the paper of books and documents in India has caused some anxiety, as it becomes brittle and breaks easily No cure is known, but special care in the when folded manufacture seems to be important. It is recommended that documents, &c., of permanent value be sent to the Hill stations where they suffer less. The British Museum has lately published a pamphlet on the cleaning and restoration of Museum exhibits which I would recommend to those interested. It deals with a variety of subjects, from modern prints to pre-historic rock-paintings,

ENGINEERING.

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Perhaps the largest undertaking accomplished during the past year is the King George V. Dock, recently opened in the Port of London, which is 38 feet deep and covers an area of There is also a large dry dock in connection with An ambitious scheme of a canal to give access for large ships to the great American lakes is being put forward, but whether even the Americans will carry it out, is still uncertain. The question of water-power in the United Kingdom is being investigated, and many schemes have been proposed in various districts, especially Scotland and N. Wales, the rivers in many parts of the country not having sufficient fall to be of much use. The tremendous Explosion which took place at Oppau, in Germany, on September 21st, seems to have been caused by a great want of caution in dealing with dangerous Synthetic ammonia and nitric acid were produced there during the war in enormous quantities. During this period liquid oxygen explosives were used in Germany in mines, and other cases, and are now used to a certain extent in this country. They are made by saturating wood-meal, &c., with liquid oxygen, and are effective and comparatively safe, but require skilful and speedy preparation or the oxygen For miners' safety lamps, perforated metal has recently been employed instead of the original copper wire gauze which I should have thought was a stronger and tougher screen and less easily damaged by accidental blows; also, to produce a better light, a glass chimney has been added, I suppose inside the metal screen. In these days of expensive coal, various substitutes and modifications are utilized. Powdered coal can be used as fuel, being driven in by fans or compressed air, lignite is being used in Germany in large quantities, the use of oil has become very extensive and peat has been tried with not very satisfactory results. mineral sources in India, especially in coal and iron, though not often brought into public notice, are nevertheless very great, and it is not improbable that in the existing state of these industries they may before long undergo a large

Stainless steel, which we chiefly see used for development. knives, is available for many purposes, amongst them that of turbine blades. In an experimental wheel fitted in 1916 with blades of phosphor-bronze, nickel-bronze, brass, mild steel and stainless steel, the latter were the only ones in July, 1921, which were in perfect condition and free from corrosion. seems a most valuable alloy and I wonder that its use is not more general for many purposes. Some curious results have been obtained in Japan from observation of the movement of the tops of tall chimneys in a strong wind. One unexpected feature is that the greatest movement is at right angles to the direction of the wind, the movement in the wind's direction being comparatively small. Thus at the top of a chimney 550 feet high, these were 7³/₄in, and less than 1in, respectively. in a gale of 78 miles an hour. A new aeroplane height record has been registered in America, amounting to 40,800 feet Ice formed in the oxygen tank at 39,000 feet. Much difficulty has been experienced in synchronising speech and action in kinematography, so as to enable both to be produced as in real life, but this appears now to have been accomplished. A very remarkable discovery is that of a certain instrument in which rotation is effected by the gaze of the human eve. the eye is closed the rotation ceases. The cause is not apparently known with certainty, but is thought to be connected with light. We have heard a good deal lately of the wonderful artificial arms, with hands which can be used to lift a glass to the lips, to pick up and light a match and for many other These are however, very expensive and I believe get out of order and require very expert skill to put them right, though when used by a practised performer they act A machine for armless men has now been successfully. invented in the form of a table with rods and levers worked by the toes, which actuate various appliances at the level of the table which perform some of the more simple operations of a hand. I have no experience of these, but if successful they will be a great boon to the armless, especially those who have lost the entire arm and cannot be fitted with a useful substitute.

1

GEOGRAPHY.

The ascent of Mt. Everest, the world's highest peak, which, when I was at school, was stated with great apparent accuracy to be 29,002 feet in height, although this altitude has I think been slightly increased, is, like the reaching of the North and South Poles, one of those expeditions to which romance gives additional interest. Last summer two of the party got within 6,000 feet of the summit and no insurmountable difficulty is expected in reaching the extreme top by the expedition which has this year set out for the purpose. Much surveying and mapping has been accomplished, and much information obtained as to the geology and fauna and flora of those regions, and valuable collections made, and it is hoped that more will this year be done in addition to the actual ascent. expected that the base camp near Mt. Everest will be reached early in May. When one reads that in a recent ascent of Kilimanjaro in East Africa the rarified atmosphere forced two of the party and several natives to give up the attempt at less than 18,500 feet, and that the top, 19,720 feet, was only reached with difficulty on this account, one wonders how human beings will succeed in climbing nearly 10,000 feet higher! On Mt. Kilimaniaro a considerable shrinkage of the glaciers was noted since 1889. The Antarctic expedition which started in September, 1921, was turned into tragedy by the death of · Sir Ernest Shackleton, its heroic leader, on January 5th of the The expedition will however be continued. present year. The Report of a marine expedition to Barbadoes and Antigua, begun in 1918, has lately been issued, dealing with much scientific information about those neighbourhoods. A Danish expedition to carry out deep sea investigations left Copenhagen on August 30th last, and expects to be away for 10 months in the N. Atlantic. I would also mention two land expeditions, one from North America to Peru, to study the adaptation of man to life at an altitude of 14,000 feet or more; the other sent by the Sudan Government to study the ethnography of certain tribes on the East bank of the Nile, some of whom have remarkable beliefs and ceremonies. The Royal Geographical Society has recently issued lists of 500 place names, giving the official spelling decided on. The aim has been generally to retain the native spelling, but sometimes the usual English form has been adopted. Marseilles is to be Marseille, but Lyons is to remain Lyons, and other names are to be somewhat altered from the usual English form, causing a little temporary inconvenience but perhaps better in the end.

ARCHÆOLOGY AND ANTHROPOLOGY.

By the kindness of Dr. Smith-Woodward, our distinguished Hon, Member, I had, lately, during a visit to him at the Natural History Museum, the great interest of seeing and handling the skull of a very remote ancestor, the Piltdown man, Eoanthropus dawsoni. He pointed out to me the extremely close resemblance of the bone of the lower jaw to that of a chimpanzee, placed for comparison, but the two teeth which remained in situ. were distinctly human. The study of these ancient races is rendered difficult by the extreme rarity of specimens. latest find is a skull, with a few other bones, of an early man from a cave in Rhodesia, which resembles in many respects the Neanderthal skull, but is somewhat more ape-like in its large brow-ridges, and hardly referable to the same race. add to the remarkable series of rock paintings now known. one has been found of Palæolithic date in a Pyrenean cave showing a number of animals arranged as a frieze and a figure of a masked man with a tail and with stag's antlers on his head. Magic or witch cult is suggested. Five instances of representations of the constellation of the Great Bear on bones of the Neolithic period have also been found, and in La Vendée a stone engraving of the Pleiades, with 10 stars instead of the usual seven. An interesting exhibition of reproductions of the many prehistoric rock paintings and other representations made by early man has lately been held in Madrid, including those found in Spain and elsewhere. In Norfolk several thousands of the stones which were heated and thrown into water to make it boil, were found in a mound, shewing the presence of a large prehistoric kitchen. Similar collections

have occurred in other parts of the country. Some ancient cup-markings have been found on a rock in Green Island, Jersey, which has only been severed from the mainland in comparatively recent times and is now entirely submerged at Excavations in Mexico have revealed the remains of an ancient pyramid temple with a sculptured frieze with serpents' heads and masks of the water-god Tlaloc, of an unknown type. The pyramid was formed of mud and fragments of pottery. An interesting discovery in the somewhat similar early civilization of Peru shows a vase with a painting of the weaving of tapestry on a loom with no treadle, and, as this vase belongs to the earliest cultured period, it suggests that the treadle was a later invention. The early cloths of Peru rival those of Ancient Egypt. A new development of naturalistic art, believed to date about 2200 B.C., has been found in tombs at Cusze, about 200 miles south of Cairo. A lion catching a bull by the muzzle, hounds pursuing antelopes. and a hunter shooting an arrow at flying deer are realistically The early Egyptian dates are very uncertain and those deduced from different sources vary greatly. last attempt is from comparison with the Sumerians, a Mesopotamian people who had much in common with the Egyptians. and who, it is thought may have been their predecessors in Egypt. By this method the very moderate date of 3200 B.C. is arrived at for Menes, the first Egyptian King, which other authorities increase up to nearly 6000 B.C., there being no reliable data. The practice of mummification occurs in other parts of Africa, having been apparently brought from Egypt at a remote period. It is chiefly used for the bodies of chiefs. The contents of some tombs of the second century A.D. in Auvergne have been found to be in an extraordinary state of preservation. A body in a coffin lay as if only just dead, but crumbled into dust suddenly on exposure to the air, whilst articles of leather, linen and wool were in good condition. I was much struck, during a recent visit to London, with the number and size of pieces of ancient Chinese pottery of the Tang dynasty (618—907 A.D.) in the Museums and elsewhere. which have I believe been obtained in recent years. They are

mostly large, up to about three feet high, made of rough pottery well modelled, and ornamented chiefly with vellowishbrown and green glazes, and represent human and animal figures, chiefly horses. They have been found in tombs, and I was told that the excavations necessary for making a new railway had produced a good many. I saw many things of great interest, but will only allude to one other variety of ancient pottery from Rhé or Rhages, the city mentioned in the Book of Tobit, which was destroyed in the thirteenth century A.D. A great variety of pottery, some with very beautiful turquoise and other glazes, some lustred, has been unearthed from the ruins, but the present pieces are remarkable for the delicacy of the paintings, which consist mostly of groups of figures in colours, chiefly on bowls. They are something like the groups on Chinese and Japanese porcelain, the pottery itself being of a light grevish brown. An examination of a piece of Babylonian glass of about 1000 B.C. indicates that it was made by the application of soft glass to a clay shape, and the presence of indigo has been chemically proved in the garment of an Egyptian princess of the same date. A primitive water-clock is still in use in some parts of Algeria, in the form of a metal bowl with a small hole in the bottom. This, when floated, gradually fills and sinks, and each landowner is allowed a certain number of sinkings whilst the water irrigates his land. It is then turned on to his neighbour's. The second International Congress on the History of Medicine has lately been held in Paris when papers were read on Medicine in the fourteenth century and earlier. The meeting is this year to be held in London. A discussion on the origin of the Scottish people was held at the last British Association Meeting, but the diversity of the views expressed prevents me from giving any account of them.

GENERAL.

The inauguration of the Institute of Physics about a year ago is one more step in the general advancement of science, which seems to be gradually taking a more prominent position in many places where it was formerly ignored. The object of the Institute is to look after the professional interests of physicists, who, as a class, have always seemed particularly careless of their worldly advancement, and generally to forward the development of physics. At the meeting at Melbourne of the Australasian Association for the Advancement of Science, much interesting scientific work was recorded. importance of the preservation of the native fauna and flora and the maintenance of such reserves as Kangaroo Island were insisted upon, as also the importance of securing ethnological specimens while still possible. The President's Address dealt chiefly with Australian native anthropology. which is much complicated by the great variation in the native customs, beliefs and arts, as well as in the skull The meeting of the Museums Association measurements. was last year for the first time held outside this country, in Paris, and great facilities were afforded to its members for inspecting the vast treasures in the various museums of that About 70 delegates from national, municipal and semiprivate museums were present, and doubtless obtained many fresh ideas for the improvement of their own museums. introduction of the metric system into this country has been much discussed, and it is interesting to note that Japan has lately decided to adopt it. It is not improbable that this may ultimately have the effect of making it the practice of Eastern nations generally. Some investigations as to the effect of the divining rod in finding water have been carried on in Australia, where this method is generally believed in and much used. It was found that in the 56 bores examined, 70 per cent, were successful, whereas out of 96 selected without the diviner's help, 87 per cent. produced water. Science in general does not favour the diviner, but the little evidence I have personally experienced has been most strikingly in his fayour, and I cannot but believe in his power. But as to the cause and nature of the influence we are still quite ignorant. applies however to so many accepted facts, that by itself it should have no weight. The little we really know, or think we know, is small compared to the mass of our ignorance. The report of the Committee appointed by the British xciv...

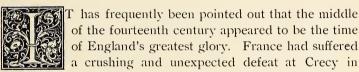
Association to inquire into the practicability of an International Auxiliary Language has been presented. Latin is dismissed on account of the difficulty of learning it and the necessity for coining a number of new words. English is the most widespread of modern languages and is in many ways suitable, the chief objection being that any modern language would excite jealousy in other nations. The Committee therefore recommend an invented language, either Esperanto or Ido. development of Esperanto, and from the specimens given, a little more lengthy, but, I should say, somewhat easier to acquire or translate. It is also without accents. Either is said to be much more easy to learn than any foreign language. If Ido should come to form part of the education of every individual and be used in all public matters, including perhaps newspapers, there would be great danger of the language of the country becoming more or less obsolete, which would be most regrettable considering the vast treasures of literature which would then be accessible only to the few, and for A great deal of time and thought has of late other reasons. years been devoted to the investigation of the results of work done under different conditions, and similar problems. I regret to say that at the same time, work has come to be looked upon in many quarters as a necessary evil, to be avoided when possible. This should not be so, for to a healthy minded person there is a pleasure and satisfaction in good work accomplished. For the others, let me give as an encouragement one of the scientific results of the above. "Habitual hard work may maintain a man's stamina to greater ages than is found in sedentary individuals," in other words, "Hard work gives a strong old age." May we all have the satisfaction of the first and derive benefit in our declining years!



The Black Death in Dorset.

By the Rev. Canon J. M. J. FLETCHER, M.A.

(Read December 6th, 1921).



1346. In the following year Calais was taken. And when Edward III, in the height of his triumph, landed at Sandwich on October the 14th, 1347, the whole country seemed to be carried away with excitement at the success of their King. To all appearance an era of glory, of peace, and of plenty had arisen. It was the golden age of chivalry. And, in various parts of the country, tournaments were held to celebrate the establishment of the Order of the Garter, which appears to have been instituted by the King in order to hand down to posterity the memory of his martial prowess.

Such was the England upon which the great pestilence fell in the summer of 1348. It has been described as having been "a turning point in the national life. It formed the real close of the mediæval period and the beginning of our modern age. It produced a break with the past and was the beginning of a new era. The sudden sweeping away

of the population and the subsequent scarcity of labourers raised, it is well recognised, new and extravagant expectations in the minds of what are called the lower classes; or, to use a modern expression, labour began then to understand its value and assert its power." *

For two years or more, previously, there had been rumours of a mysterious disease which had been raging in the distant east, and by which, in a brief space of time, whole districts were depopulated. China and India more especially suffered. Tartary, Mesopotamia, Syria and Armenia were depopulated. Cairo lost daily, while the plague was at its height, from 10,000 to 12,000 persons.†

Its specific causes are unknown. The opinion of the time connected its appearance with contemporary physical phenomena of a remarkable kind. Parching droughts were succeeded by convulsions of the earth and crackings of its surface from which a fetid and poisonous vapour was projected into the atmosphere, the corruption of which was afterwards increased by malarious exhalations from swamps caused by incessant deluges of rain. To the panic-stricken imagination of the people, the pestilence seemed to be advancing to their destruction in the palpable form of a thick stinking mist.

The pestilence found its way to Europe along the great trade routes, being carried by the trading caravans which brought spices and gums and silks and other produce of the eastern markets. An Italian writer ‡ tells how the infection was brought to Genoa. Some number of Italian merchants had resorted to a place called Tana, north of Constantinople and under the rule of the Tartars. Tana was besieged and taken by the Tartars; and the Christian merchants, who were violently expelled from that city, were then received, for the

^{*} F. A. Gasquet, The Great Pestilence, p. xvi.

[†] Hecker, Epidemics of the Middle Ages (translated by Babington), 2nd Edit., 1835, p. 21.

[‡] Gabriele de Mussi, *Ystoria de Morbo*, quoted by Gasquet, *Op. cit.*, pp. 4, 17, &c.

protection of their persons and property, within the walls of Caffa, which had been built by the Genoese in the Crimea. This, too, was attacked by the Tartars, and the inhabitants were hard pressed. Suddenly the plague broke out amongst the Tartar host. At first they were paralysed with fear; and then, turning their vengeance on the besieged, and, in the hope of communicating the infection to their Christian enemies, by the aid of the engines of war they projected the bodies of the dead over the walls into the city. As far as possible the plague-infected bodies were committed to the sea. Before long, however, the air became tainted, and the wells of water poisoned. In this way the disease spread so rapidly in the city that few of the inhabitants had strength to fly from it. From the Crimea the plague seems to have found its way to Constantinople, which, at that time, was the great centre of communication between the Asiatic and European countries. It reached Italy in the early days of 1348, being brought from the Crimea to Genoa and to Venice. Boccaccio | tells us graphically of what happened at Florence. All classes were Magnificent dwellings were rendered desolate. sometimes to the last inhabitant. Riches were left with no known heir to inherit them. People of both sexes dined, apparently, in the best of health, and at supper time were lying dead. Stricken children were forsaken by their parents. The poor languished on the highways, in the fields, or in their own cottages, and were dying like animals. Flocks and herds wandered unwatched through the forsaken harvest fields.

The pestilence reached France about the same time that it reached Italy. From Genoa it was brought to Marseilles, where in a month 57,000 were carried off by the sickness. It reached Avignon, where Pope Clement VI held his court, in the early days of January, 1348. Here, in the first three days, 1,800 people are said to have died; and in the seven months that the plague lasted no less than 150,000 persons in the surrounding territory died. The Pope found it necessary

Boccaccio, Decameron, Introduction,

to consecrate the Rhone, that bodies might be thrown into the river without delay, as the churchyards would no longer hold them. He himself lived in seclusion in his palace at Avignon, keeping up constant fires and allowing no one to approach him.

The pestilence first attacked England in the summer of 1348. It was probably brought from Calais, being conveyed by fugitives who came to England in hopes of escaping from it. It appears certain that the *first* place attacked was Melcombe Regis, or Weymouth, which at that time was apparently almost as important a port as Bristol or London.

"In the year of our Lord 1348, about the feast of the translation of S. Thomas (July 7th)," writes the Author of the *Eulogium Historiarum*, a contemporary monk of Malmesbury, "the cruel pestilence, terrible to all future ages, came from parts over the sea to the south coast of England into a port called Melcombe, in Dorsetshire. This plague, sweeping over the southern districts, destroyed numberless people in Dorset, Devon and Somerset."

Bristol more especially suffered. Other dates given for its first appearance in this country are July 25th and August 1st, while another contemporary monkish chronicler* states that it began in the autumn of the year 1348. News of its actual presence had not apparently reached the Bishop of Bath and Wells† on August 17th, for on that date he sent letters throughout his diocese ordering processions and stations every Friday, in each collegiate, regular, and parish church, to beg that Almighty God would protect the people from the pestilence which had come from the east into the neighbouring kingdom. The same bishop, a little later, issued a mandate which he ordered to be read clearly and distinctly in the cathedral on the 10th of January, 1348-9.‡ In it he speaks of the pestilence

[§] Eulogium Historiarum, Vol. III, p. 213.

^{*} Henry Knighton, Chronicon Leycestrensis (Rolls Series), Vol. II, pp. 58, &c.

[†] Ralph of Shrewsbury, Bishop, 1329-1363.

T Wilkins, Concilia Magn. Brit., 1737, Vol. II, pp. 745-746 (Ex reg. Wellen., fol. 333).

having left many parishes destitute of spiritual care and without a priest. Numbers of people were dying without the Sacrament of Penance, in consequence of the infection, and through dread of the disease. And he directs that it shall be made generally known that, if a priest cannot be found, confession of sin may be made to a layman, or even in case of necessity to a woman; though, if the penitent recovers his health, confession is again to be made to a priest. Moreover, in the absence of a priest, the Sacrament of the Eucharist may be administered by a deacon. And if no priest can be found to administer the Sacrament of Extreme Unction, then, as in other cases, faith in the sacrament ought to suffice.

It is said that from June 24th until Christmas it rained either by day or by night almost without exception. And no doubt the abnormally wet season, unhealthy as it naturally was, would aid the development of the sickness.

The Pestilence appears to have been some form of the ordinary Eastern, or bubonic, plague. It showed itself in swellings and carbuncles under the arm and in the groin—sometimes in size as large as a hen's egg, at others smaller and distributed over the body; but in addition there were special symptoms, from one or more of which the patient suffered, which seemed to differentiate it from the common type, viz.:

- (1) gangrenous inflammation of the throat and lungs,
- (2) violent pains in the region of the chest,
- (3) the vomiting and spitting of blood,
- (4) the pestilential odour coming from the bodies and breath of those affected.

Though many recovered from the carbuncles and glandular swellings, it is stated that none did from the blood spitting. Sometimes the patient died within a few hours, though more usually the sickness lasted from three to five days before death.

^{||} Gasquet, The Great Pestilence, p. 7. | Hecker, Epidemics of the Middle Ages, pp. 4-27. | Villani, quoted by Dr. Jessopp in The Black Death in East Anglia. | Chronicon Galfridi le Baker de Swynebroke, Oxford 1889, pp. 98-400.

From the absence of contemporary statistics it is impossible to tell what proportion of the population was swept away by the plague. Platina, of Cremona, who lived about a century later, conjectures that, during the three years that it raged in Italy, "scarce one man in ten escaped." The same proportion is given for England by some of the Chroniclers,* who are followed by Stow and Barnes.† This must of course be an exaggerated conjecture. But, in all probability, the population of the whole country before the plague was somewhere approaching five millions, of whom perhaps the half perished in the fatal year. A certain amount of evidence, however, can be obtained from various ecclesiastical documents, such as the records of institutions to vacant benefices, lists of ordinations. &c. And, if I seem to deal mainly with ecclesiastics, I would point out that it is because such statistics are to a certain extent available; and, what is more, that they are practically the only ones that are, with the exception of what may be surmised from the Court Rolls. I propose for the most part to confine myself to the county of Dorset, merely stating beforehand that, in January, 1349, Parliament, which was to have met at Westminster, was prorogued until April, 1 in consequence of the deadly pestilence having broken out and daily increasing in severity, so that grave fears were entertained for the safety of those attending. In the early spring it was again found necessary that it should be prorogued indefinitely.

Dr. Gasquet gives the number of Institutions in the county of Dorset during the seven months from October 1348 until April 1349, as 5, 15, 17, 16, 14, 10, and 4, or a total of 81, whereas the previous average had been only one a month. That is to say that during those months there were more than

[§] B. Platina, Lives of the Popes (Clement VI).

^{*} Galfridus le Baker, *Op. cit.*, p. 98. T. Walsingham, *Historia Anglicana* (Rolls Series), Vol. I, p. 273. *Annales Monastici* (Rolls Series), Vol. III, p. 475.

[†] Barnes, History of Edward III (Cambridge, 1688), p. 435. Stow, Survey of the City of London, Vol. I, p. 129, Vol. II, 61. 62.

[‡] Rymer, Fædera, Vol. V, p. 655.

[|] Ibid, p. 658.

eleven times the usual number of Institutions. The learned Doctor must have dealt, I think, only with Institutions to benefices conferred by the King or by some monastic or other quasi-public body; for from the episcopal registers, which are preserved amongst the muniments of our own Cathedral at Salisbury, and which I have examined carefully, the number of actual Institutions to Dorset benefices will be found to be 4, 17, 28, 21, 12, 12, and 6—making a total of 100. And furthermore in these numbers are not included Institutions due to vacancies which had been caused by resignation or exchange. The pestilence still lingered on during the next four months, May to August, when the Institutions, owing to death, numbered 9, 3, 11, and 5.

West Chickerell appears to have been the first parish to be deprived of its Incumbent, for his successor was instituted on September 30th, 1348. His oversight of the parish, however, was but a short one, for another Institution to West Chickerell was necessary on the 6th of the following March. During October, 1348, there were Institutions to Warmwell on the 9th, and to Wool, Combe Keynes # and Holy Trinity, Dorchester, on the 19th. From then the deaths of Dorset clergy followed one another in quick succession. The parts of the county most affected were the districts within a short distance of the coast, and the villages through which the Winterbourne passes before emptying itself into the Stour. Bincombe changed its Incumbent both in November and in March; Worth Matravers lost both Rector and Vicar; at East Ringstead (Osmington) there were two changes in a short space of time; Tyneham suffered early in November; Warmwell, Combe Keynes and Wool have already been alluded to; Winterbourne Monkton, Winterbourne Houghton, Winterbourne Came, and Radipole doubtless caught the infection from Weymouth or from Dorchester. At Wareham the Incumbents of Lady S. Mary, S. Martin, S. Michael, and S. Peter (two?), as well as

[†] Wool and Combe Keynes, however, were held in plurality by John Glanvill in succession to Richard Palmere. Consequently the loss by death was only one and not two.

the Prior of the alien Priory, were amongst the victims; There were new Incumbents at Milborne S. Andrew in November and again in February. Between November 17th and November 20th there were eight Institutions, seven of which apparently were due to the death of previous Incumbents, viz.:—on the 17th at Kingston Russell.* on the 18th at Cerne Abbas, East Lulworth, and East Morden (as well as one at Catherston Leweston, through resignation), on the following day at Toller Porcorum and Winterbourne Zelston, and on the 20th at Langton Long, Blandford, of the Chantry Priest. At Langton, although the Rector lived through the visitation, another Institution to the Chantry followed in June. Then there were Owermoigne, Affpuddle, Chalbury (twice), West Chaldon (now united to Chaldon Herring) both in December and May, West Knighton, and Stafford. Along the Valley of of the Winterbournes, Clenston S. Nicholas suffered most severely, there being fresh Institutions on December 7th. March 6th, April 8th, and yet again on May 3rd; while Winterbourne Houghton had three changes, viz.: on December 18th, March 5th, and June 7th. The Winterbournes Steepleton, Stickland, Whitchurch, and Zelston all lost their clergy, as, too, did Sturminster Marshall, which lies near the junction of the Winterbourne and the Stour. Not far away is Spetisbury, which lost two of its Rectors as well as two Vicars, Lytchett Matravers and Hilton, two other sufferers, are in the same neighbourhood. Lower down the Stour from Sturminster Marshall we come to Wimborne Minster,† two of whose Deans died in quick succession. Here the Win, or Allen, joins the Stour; and along the Win there were fatal cases amongst the clergy at Witchampton, Wimborne S. Giles, and Wimborne All Saints.

[|] Originalia Roll, 22 Edw. III, m. 4.

^{*} Here, as elsewhere at implies for, or on behalf of. No doubt the clergy were usually instituted at Salisbury, or wherever the Bishop might be at the time.

[†] Close Rolls, 23 Edw. III, January 31 and June 17.

Blandford Forum, on the Stour, so far as its clergy were concerned, seems to have escaped the ravages of the disease; but Blandford S. Mary, Pimperne, Tarrant Monkton, Tarrant Rushton, Okeford Fitzpaine, Shillingstone, Farnham, Iwerne Courtney, Hammoon, Fontmell Magna, Iwerne Minster, Ibberton, Marnhull, Thornton (early in December and again in the middle of April), and Stour Provost all were bereft of their parish priests.

On the other side of Dorchester, of the coast towns, Bridport was one of the first to suffer, the institution taking place on November 9th, 1348, while the new Incumbent himself succumbed just three months later. From the Bridport Corporation Records* we find that there were two Bailiffs of the town in each year; but in the 23rd year of Edward III (1349-50) four bailiffs are named, as having held office, Edward Stone, John Grey, William Hichecoke and Richard Laurenz in tempore Postilentia. The Abbot of Abbotsbury fell a victim quite early to the ravages of the disease, and, before his successor was appointed, the Vicar also died. Portesham, Puncknowle, Litton Cheney, Askerswell, Compton Valence, Allington, Bradpole (twice in the space of three months), Pilsdon and North Poorton were deprived of their elergy, as were Maiden Newton, South Perrott, Hooke, Toller Porcorum, Chelborough, Chilcombe, Chilfrome, Broadwinsor and Buckland Newton.

The northern part of the county was not nearly so much affected, though Gillingham lost one of its Chantry Priests at the beginning of December, 1348. Shaftesbury, however, suffered most severely. The Abbess herself fell a victim to the terrible disease, which also proved fatal to the Incumbents of S. Peter and S. Andrew, S. Martin, S. Laurence (both in November and in May), S. Mary and S. John, and later in the year S. Ronald. In addition to these, the Monastery lost its Chaplains, both at the altar of S. Nicholas and at that of S. Curas, while the House of S. Thomas was bereft of its Custodian.

^{*} Historical MSS. Commission. Appendix to 6th Report, p. 475.

For Sherborne, there were Institutions for the Free Chapel of S. Thomas on January 12th; and on the 18th of the same month a new Abbot was elected. Castleton, hard by, had previously lost its Vicar before December 21st. At Bradford Abbas, not far away, a new Vicar was instituted on December 1st. He can but have lived for a few days, for just twelve days later, on December 13th, in consequence of his death a successor was instituted; and about eight months afterwards, on the 20th of August, 1349, the death of this successor is noted, and there was yet a third Institution. Chardstock, farther S.W., on the borders of Devon, saw changes of Incumbents on March 8th and on December 8th.

Enough has been said to show how widely spread the ravages of this terrible disease were in the County of Dorset.

Although our own Bishop, Robert Wyvil, was spared, for his episcopate lasted from 1330 until 1375, yet two of our Metropolitans died of the plague. John de Ufford was elected Archbishop of Canterbury upon the death of John Stratford, and received the temporalties on December 14th, 1348; but he died of the plague before his consecration, on the 20th of May, 1349. He was succeeded by Thomas Bradwardine, who was consecrated on the 19th of July, 1349. This great and good prelate, writes Dean Hook,† who had known how to administer

"the consolations of religion to the wounded in camp, and to the dying on the field of battle, regarded the post of danger as the post of honour. He hastened to England, prepared to lead the way to the abodes of sickness, sorrow, and death."

He landed at Dover on the 19th of August, and after doing homage to the King, who held his court at Eltham, on the 22nd, he proceeded to London. At once he sickened of the plague, and died on the 26th of August.

There was a return of the plague in 1361, and, great as had been the mortality amongst the clergy of Dorset in 1348-49, at this later visitation it was, if anything, greater. Amongst

[†] W. F. Hook, Lives of the Archbishops of Canterbury, Vol. IV; p. 106.

the victims of this second pestilence was Thomas de Brembre, Dean of Wimborne Minster, and founder of a chantry in that Collegiate Church. Wimborne had lost two Deans during the time of the preceding visitation. And this was not all, for the Bishop of Worcester, Reginald de Bryan, who had formerly been Dean of Wimborne, died in his Cathedral City of the plague. Amongst other Dorset Incumbents who died were those of Canford, Lytchet Matravers, Moor Crichel, Hinton Martel, Chalbury, Gussage All Saints (two), West Almer, Iwerne Minster, West Parley (two, viz. on August 27th and on September 6th), Pentridge, Edmondsham, Tarrant Gunville (two), Long Crichel, Belchalwell, Pulham, and Buckland Newton; and at Shaftesbury, S. Peter (two), S. Martin, and S. John.

It will be interesting just to look at the comparative numbers of deaths amongst the clergy in the neighbouring counties of Wilts and of Hants.

In *Wills*, the Institutions, according to the Registers of the Bishop of Salisbury, in 1343 were 15; in 1347, 29, which number would be above the annual average. In 1348 they had risen to 72, and in the following year to 103. In 1361, during the second visitation of the plague, they were 128. At Ivychurch Priory, in Wilts, a house of Augustinian Canons, the ruins of whose abode are still to be seen some three miles or so to the east of Salisbury, the whole community was carried off with one single exception.

In *Hants*, the number of Institutions in December 1348 was 7; in January, 12; in February, 19; March, 33; April, 46; May, 29; June, 24; July, 18; August, 11; and in September 12; or during the ten months, 211, which would be about ten times the annual average.

What has been said of the mortality amongst the clergy will imply that there must also have been a terrible mortality amongst the people in general; although no doubt, in the exercise of their office amongst the sick and dying and with the dead, the clergy would be more especially exposed to the

risk of infection. It is quite evident that the ranks of the clergy must have been very seriously diminished. And, consequently, steps had to be taken to supply the places of the parish priests and chaplains of the religious houses who had died in such great numbers. The regular times of Ordination, at the Ember Seasons, had to be disregarded; and not infrequently men who had only attained to the "minor orders—deacons, and even acolytes—were instituted to vacant benefices before being raised to the priesthood. over again we read of permission being given for considerable numbers of men to be ordained priest who were under the canonical age. And sometimes they were passed very quickly through the various orders to the priesthood. It has generally been considered that it was partly due to this that there was a marked decline in the spirituality, as most certainly there was a deterioration in the intellectual attainments, of the clergy.

"So great," writes the chronicler, \ddagger "was the dearth of clergy that many churches were deprived, and were wanting in divine offices, masses, mattins, vespers, sacraments, and sacramentals. It was difficult to get a chaplain for less than £10, or 10 marks, to minister in a church, instead of for four or five marks, or two marks with board (cum mensa), as before the pestilence when there were plenty of priests. It was difficult to get anyone to accept a Vicarage for 20 marks or £20. But in a short time a great multitude whose wives had died of the plague, many illiterate and mere laymen, barely able to read, still less to understand, became candidates for orders (confluabant ad ordines)."

There was a natural reaction upon the religious life of the nation. One good result, however, was the foundation of Winchester College, of which the plague was the proximate cause, the ultimate cause being the wish to have a learned clergy to carry on the duties of the church and the business of the state. And in the first clause of the Statutes of New College, Oxford, William of Wykeham's other great found-

[‡] Henry Knighton, Chronicon Leycestrensis, Vol. II, p. 63.

ation, the munificent Founder sets forth with great clearness the objects of his foundation, and shows that what he intended was to provide educated clergy, who were not monks, but seculars, to fill up the gaps caused by the Black Death.

And the recurrence of the pestilence, in some places at any rate, drew attention to the advisability of better sanitary conditions. In one of the Close Rolls† is a King's letter relative to Butchers' Hall Lane, or Stinking Lane, London (25th February, 1361).

"Order that all Bulls, Oxen, Hogs, &c., should be led as far as to Stratford or Knightsbridge to be slain, instead of being killed in the city, and the putrified blood running down the streets, and the bowels cast into the Thames, whereby the air is corrupted and sickness and other evils have happened."

Although at first the scourge fell most heavily upon the labouring classes, it was not long before it produced a marked improvement in their social status, and eventually a general enfranchisement of servile labour. In numberless manors so many of the peasants had been swept away that the land could not be tilled, but lay fallow and neglected. method of farming by bailiff gave way firstly to the system of stock and land lease, and gradually to that of ordinary tenant And, partly from lack of labourers, and partly because it was found to be more profitable to "grow" wool than corn, large tracts of land which had formerly been cultivated were converted into pasture. And, indeed, labour was in such request that it could make its own terms; and, in spite of statutes and enactments and branding and fines and imprisonments, men were not content to be bound down as in past days to reside always in their old neighbourhood and to work for a mere pittance. The Statute of Labourers was passed in 1349, immediately after the first visitation of the plague, with the idea of compelling labourers to work for the

[†] Lit. Claus, 35 Edward III, Feb. 25, quoted in Stow's Survey of the City of London (1720), Vol. I, p. 129.

[†] Thorold Rogers, Six Centuries of Work and Wages, pp. 277-280, &c.

wages formerly accustomed to be paid, and confining them to their own counties. This and subsequent laws passed were but imperfectly obeyed, and eventually,

"under the dread of servile war, the abolition of compulsory service and all the other demands of the populace were tacitly but surely accorded. Thus, within fifty years of the visitation of the Black Death, serfdom and villainage were practically abolished in England, and the labourer, released from his bondage to the land, was free to carry his thews and sinews to the best market" ||.

W. Warburton, Edward III, p. 144.

In addition to the authorities noted, the following works may be consulted. Seebohm, Articles in *Fortuightly Review*, Sept. 1, and 15, 1865.

Creighton, History of Epidemics in Britain, Vol. I.

Victoria History of Dorset, Vol. II, pp. 20, 21.

Euglish Historical Review, July, 1890, p. 524.

Stubbs, Constitutional History (1875), Vol. II, p. 434.

Dr. Jessopp, Nineteenth Century, Vols. XVI, p. 915, and XVII, p. 599.

Stow, Annales, 384.

Thucydides, History of the Peloponesian War, Bk. II, sect. 47-57.





Dorset Church Woodwork.

By Mr. E. T. LONG.

(Read December 6th, 1921).



ORSET cannot show the wealth of pre-reformation woodwork which is to be found in such profusion in the neighbouring counties of Somerset and Devon. Doubtless the misguided fanaticism of the

reformers and Puritans of the sixteenth and seventeenth centuries, coupled with the equally misguided zeal of the nineteenth century restorers, is mainly responsible for the disappearance of the greater part of the ancient fittings of our parish churches. Still, in spite of reformers, Puritans and restorers, a certain amount—far more than is generally supposed—has survived to the present day. The screens and roofs have already been dealt with in previous papers, and in this article it is proposed to describe the bench-ends, stalls, doors, pulpits, chests, etc., which still remain in our churches. It is not proposed to deal with post-reformation fittings in this paper.

As is to be expected, the fittings that survive are of essentially West Country type, and are closely allied to contemporary work in Devon and Somerset, though certain peculiarities are to be noticed, especially in the bench-ends,

which in some respects differ from those of the adjoining counties. Practically all the woodwork which will be mentioned is of late fifteenth or early sixteenth century date, i.e., between 1475 and 1550. Some of it is especially interesting as showing good early renaissance detail of singularly pure and refined design, of which perhaps the best examples are at Affpuddle. There is no doubt whatever that mediaeval woodwork reached the zenith of its excellence at the end of the fifteenth century, to which period belongs the glorious rood screen at Trent, and the painted pulpit at Winterbourne Whitchurch. This supreme excellence was maintained until the baneful reformation put an end to all church building throughout the county.

It is difficult for us to realize now the supreme magnificence and richness of the interiors of even the humblest of our village churches before the great pillage. Then, every church in the land had its screen bearing aloft the sign of our Redemption. The nave had its well-carved benches and pulpit, and in the chancel were comely stalls, and every altar glowed with sculptured reredoses of wood and alabaster. The roofs glowed with rich and subdued colours, while the windows were filled with the most exquisite painted glass, of which but slight fragments remain to delight us with their rich hues. The walls were adorned with finely wrought paintings; in fact the whole fabric glittered and shone with beauteous colouring applied with lavish and artistic hand to almost every portion. There was a friendly rivalry between parishes as to which should make their church the most beautiful and worthy of God's service; and the fabrics and their fittings were continually growing in sumptuous beauty until the fierce blast of the reformation swept away the majority of these lovely fittings, which were the pride and delight of our forefathers. How charming must have been the stalls and alabaster statuary in the Franciscan church at Dorchester and in that of the Dominicans at Weymouth, which are referred to at the dissolution of these houses in 1538

I may add here that the Dominican church at Weymouth, in part at any rate, survived until 1861, when it was utterly swept away. Much of what escaped the reformation perished at the hands of the Puritans in the seventeenth century. Even the nineteenth century was responsible for much wilful destruction, under the name of restoration, as a perusal of the pages of Hutchins will show. Those who would study the fascinating problem of church woodwork in England cannot do better than read the monumental work on the subject by Messrs. Howard and Crossley, entitled *English Church Woodwork*, which gives an adequate idea of the wealth of art still remaining in English Churches.

We will now proceed to deal with the surviving mediaeval woodwork of Dorset under its respective heads, the subjects and places being described in alphabetical order.

BENCH-ENDS.

In comparison with the sumptuous bench-ends of Devon and Somerset, the Dorset examples must seem rather tame and ordinary; but nevertheless the county can show some really first-class work, though somewhat limited in quantity and hidden away in remote places. All the surviving examples are of late fifteenth or early sixteenth century date as far as can be ascertained.

Affpuddle has a remarkably fine set of bench-ends dated 1548, when they were erected by Thomas Lyllyngton, vicar there at that time, and formerly a monk of Cerne. An inscription on one of them records this fact. They possess good poupée heads of bold design, and are adorned with a variety of well-carved arabesques, while the backs have linenfold panels. The inscription referred to above is as follows:—
"Thes seatys were mayde in the yere of oure Lord God MCCCCCXLVIII, the tyme of Thomas Lyllyngton vicar of thys cherch."

At Bere Regis some sixteenth century bench-ends now form the back of two blocks of seating in the nave. They are adorned with arabesques and flamboyant tracery; and on one is the following inscription:—"John Day Warden of this Charys." On another is the date MCCCCXLVII. They resemble the contemporary work at Affpuddle.

Bradford Abbas possesses some excellent bench-ends of Somerset type with tracery and other devices. One has St. Paul with sword and book. Near the font is one with a pig feeding under a tree with birds above in the branches. Several have floriated foliage. The backs of the blocks of seating have linen panelling, and one back has good pierced work. With the exception of Trent these are the best examples of ancient seating in the county.

Buckland Newton retains some restored bench-ends of sixteenth century date with linen panelling and four poupée heads. Nether Compton has one old bench-end in the chancel, as well as six traceried panels in the stall desk on the south side of the chancel. At Fordington is preserved one bench-end with tracery. It came from Baydon, Wilts.

Gillingham, in spite of rebuilding and injudicious restoration, still retains a fair amount of excellent sixteenth century benching in good preservation. At the front and back of the blocks of seating are poupée heads, one of which has a curious face with protruding tongue. Most of the ends are adorned with tracery and foliage.

Hampreston possesses seven plain bench-ends in the chancel, and probably of late fifteenth century date. They have simple mouldings, but are otherwise devoid of ornament. The tiny church of Hillfield retains, amidst a quantity of modern seating, a little old work, including two restored poupée heads in the chancel, and some linen panels on the front of the nave benches.

Poyntington, recently transferred from Somerset to Dorset, has some plain early sixteenth century benching in the nave. At Sandford Orcas are a couple of benches in the south chapel with rough poupée heads. They probably date from 1550-1560, or possibly even later.

Shaftesbury St. Peter can show a few old bench-ends probably belonging to the early part of the sixteenth century.

They are square-headed, and have tracery except, two which are adorned with linen panelling. Shapwick possesses several plain square-headed bench-ends, which are devoid of any ornament with the exception of mouldings. Probably they belong to the sixteenth century. Toners Puddle retains four good bench-ends with sixteenth century tracery designs. They are square-headed and well moulded. Two have letters, which seem to be M.D. In the desk-front are five linenfold panels of the same date.

Trent can show the best set of old bench-ends in the county, probably of the first quarter of the sixteenth century. They are of the Somerset type and carved with a variety of designs. On one is St. John with the chalice. Another has a stag in an upright position. Four of them contain part of the Ave Maria with the words very erratically spaced. Another displays the emblems of the Passion, while others have tracery and various geometrical designs. A very fine set.

At Yetminster there are a considerable number of early sixteenth century bench-ends, several of which have poupée heads capped with Tudor flowers. They have simple mouldings, but are otherwise plain, and are probably contemporary with the roofs.

CHESTS.

The parish churches of mediaeval England were, as the inventories bear witness, exceedingly well stocked with a rich profusion of plate and vestments, and it was therefore necessary that there should be some place of security in which these valuables could be safely stored. Comparatively few of the smaller churches possessed vestries, and consequently it was the custom to keep the church goods in strong and massive oaken chests. Probably in the richer churches each altar was provided with one for storing the plate and vestments pertaining to it. The earliest type of chest was formed by hewing out the centre of a tree trunk and providing it with a wooden cover and lock. This type is usually called the dugout. It was, of course, an exceedingly extravagant method,

since the capacity of the chest was small, and the labour considerable. In the thirteenth century it became customary to construct chests of planks tenoned together and bound with a profusion of ironwork, often of an elaborate nature. Usually the woodwork was severely plain, though sometimes simple designs were carved on the surface of the planks. Towards the end of the thirteenth century it was usual to carve tracery on the panels, often of very beautiful design, and later it became the fashion to frame up the panels with corner posts and top and bottom rails, and the tracery was applied instead of being carved out of the solid. Many chests were imported from Flanders and France, and these were freely copied by native workmen. There is a particularly magnificent example of this type with flamboyant tracery and enrichments at Crediton in Devon, while we in Dorset possess a good example at Loders. At the close of the fifteenth century, linenfold panels often took the place of tracery, and honeycomb shafts were applied to the muntins. Bradford Abbas has a good example of a plain dug-out chest, probably of the early thirteenth century date, like that at Wimborne. Burton Bradstock possesses some good panels with flamboyant tracery. They are seven in number, and are now incorporated in two reading-desks in the chancel. They closely resemble the chest panels at Loders, but it is just possible that originally they formed part of a screen or pulpit. Loders possesses a beautiful French chest of the fifteenth century date. There was formerly an alien priory here belonging to the Abbey of Montebourg in Normandy, and this fact may account for the presence of the chest at Loders. There are four rich panels in front with flamboyant tracery, and the two centre ones have respectively the arms of France and the Dauphin. This tracery somewhat resembles that in the screens at Brushford, Colebrook and Coleridge in Devon. The cover and back are modern. The sides consist of two linenfold panels each. It is framed up in the usual manner. The dimensions are:length five feet, height two feet four inches, width two feet one inch. The writer recently examined this chest, and came to the conclusion that the panels do not belong to it, but were

probably part of a screen or rood loft, and were incorporated into the chest some time after the Reformation. The frame of the chest suggests seventeenth century work, and in all probability the panels were at that date utilized for their present purpose. The chest stands on four short legs, two inches in height.

Stalbridge possesses a plain iron-bound chest with three locks of uncertain date.

Sturminster Marshall has an old chest with some shallow carving. Probably it is not earlier than the sixteenth century.

Wimborne Minster retains a remarkable dug-out chest with a very small cavity. It is probably early thirteenth century work, and is usually called the Relic Chest. The dimensions are:—length six feet, and cavity 22 inches long, nine inches broad and six inches deep.

After the Reformation the chests were used for keeping registers and other documents. The post-reformation chests are usually plain, though of good construction. Numerous examples remain in Dorset, some of which are dated. Corfe has one of 1672, Holwell 1712, while Hammoon, Hermitage and many other places have seventeenth century examples.

Doors.

The usual method of construction of mediaeval doors was to build them up in two layers of thickness of boarding, the inner being horizontal, the outer vertical. These layers were nailed together with large nails having ornamental heads, and driven through and turned over on the inside. Another and less usual method was to construct a frame and nail the vertical boards to it. Again, it was sometimes the custom to form the inner frame by constructing a series of vertical and horizontal battens crossing one another at right angles and forming squares. Sometimes the battens were arranged diagonally, or even occasionally vertically and diagonally, which produced a very strong type of door. The original method of decorating the outer surface was to apply elaborate

ironwork, and this was the only method employed until the middle of the fourteenth century, and many notable examples remain in different parts of the country; but Dorset, so far as I know, does not supply any example at the present time. Later it became customary to apply wooden tracery to the upper part of the door, and this form of decoration was in use during the latter part of the fourteenth and most of the fifteenth centuries. Sometimes an applied frame was adopted with moulded uprights, and so divided the door into tall panels. Occasionally small panels of tracery were inserted in the upper parts of the panels. At Holwell the south door has very deep applied uprights which are curved in the upper part to form a kind of tracery. Sometimes the whole surface was covered with tracery or carving, and further adorned with figures in niches. This type is common in France, and East Anglia supplies a few good examples, notably at Stoke by Nayland. In the sixteenth century the surface was often charmingly decorated with arabesques and other renaissance details, as at Tiverton and Totnes in Devon. Dorset cannot show any very elaborate wooden doors, as the surviving examples are for the most part quite plain. A fair number still survive in the county, mostly of late date. Abbas has a plain sixteenth century door. Hammoon has a plain south door, probably of the sixteenth century. The south door at Holwell is probably coeval with the rebuilding of the church c. 1480. It has good handles and hinges, and has applied uprights with curved tops. The door of the stair turret at Leigh is of much the same date. The north door at Lillington is likewise plain perpendicular work. The south door at Lydlinch is old and very plain, with massive lock case. It is a good example of plain local carpentry, but is not earlier than the sixteenth century, and may be later still. The applied framework is modern. The stair door of the tower is also good but plain work, probably of the first half of the sixteenth century. At Puddletown the north and south doors are plain early sixteenth century work, coeval with the rebuilding of the church, which was consecrated in 1505. The

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north is the best. The panels are convex and studded with nails, while the inside is re-inforced with horizontal beams. Both doors have been considerably restored. At Purse Caundle is a good late perpendicular door to the Longe chantry, with open tracery in the upper part. The tower door here is also partly old work, but plain. The south door and that of the tower stair turret at Caundle Stourton are good but plain examples of perpendicular carpentry, and are constructed in the usual way, of two layers of thickness, the inner horizontal, the outer vertical. The outside is studded with nails, and divided into tall panels with moulded uprights.

FONT COVERS.

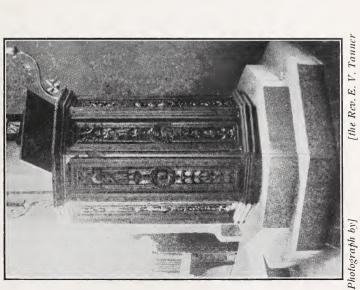
It seems that there is now only one surviving font cover in this county, namely that at Trent, which of course has only belonged to Dorset since 1896. There is no doubt that originally every font was provided with some sort of cover, as according to canon law the baptismal font was required to be kept locked, since the water was preserved, and renewed only twice a year, with solemn and symbolic ceremonies, at Easter and Pentecost. In some parts of the country, especially in East Anglia, these covers assumed large proportions, being often in the form of a lofty spire of wood, richly carved and painted. However in the West Country the covers were usually much less ambitious. It is probable that the Dorset examples were for the most part either of the pyramidal form with crocketed angle ribs and carved finial as at Monksilver. Somerset, or of the ogee dome shape with moulded ribs and carved finial as at Colebrooke, Devon. The Trent font cover, which belongs to the former type, has been much restored, and is unfortunately now disfigured by brown paint, which doubtless hides the rich original colour. Though plain, it is interesting as the one surviving example in the county. should be added that several post-reformation font covers survive, probably of the seventeenth century, as as Folke, Charlton Marshall and Winterbourne Kingston,

PULPITS.

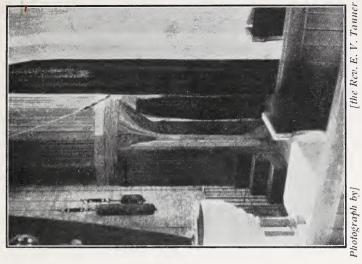
Dorset has been fortunate in retaining several very interesting wooden pulpits of pre-reformation date, and in one case— Sturminster Marshall—we have gained one at the expense of Northamptonshire. There can, of course, be little doubt that practically every parish Church possessed a pulpit at the time of the reformation in the sixteenth century; but it is probable that many were destroyed by the so-called reformers owing to the imagery or painting with which they were adorned. Others no doubt succumbed to the neglect and ignorance of the eighteenth and nineteenth centuries; and one at least— Litton Cheney—disappeared at the restoration of the church in 1877, when all the old woodwork was cleared out. traceried panels of Perpendicular date, and its loss is much to be regretted, especially as it had survived until so recent a date. Its successor is an erection of pitch pine! The prereformation pulpits of Dorset belong to the latter part of the fifteenth and the first half of the sixteenth century, with the exception of Cranborne, which has the initials of Abbot Parker of Tewkesbury, of which Cranborne was a cell. It cannot therefore be later than 1421. The latest is Affpuddle, 1548. Though few in number, the Dorset pulpits are decidedly good examples of mediaeval carpentry; and we cannot be too thankful that they have escaped the destroying zeal of the fanatic and the "restorer."

Affpuddle has a most interesting pulpit contemporary with the bench-ends and of much the same design. It stands on a modern stone base, and has unfortunately lost its tester and back piece, which are illustrated in the last edition of Hutchins. On the panels are figures of the Evangelists with their respective emblems beneath, also St. John Baptist with a pelican beneath. The figures hold scrolls. The panels are covered with arabesque designs. The pulpit is of very small dimensions.

At Broadwindsor the pulpit has been largely renewed, but contains a little old work, probably dating from the middle of



Affpuddle Pulpit.



Stratton: Tower Staircase.



the sixteenth century. When Hutchins wrote it was still perfect, and he gives a good description of it.

At Cerne there are behind the Jacobean pulpit several linenfold panels which may have belonged to an earlier pulpit, though it is more probable that they belonged to the stalls or seating, or even possibly to the rood loft. They are of early sixteenth century date. Cranborne possesses a fine lifteenth century pulpit in good preservation. On it are the initials T. P. for Thomas Parker, Abbot of Tewkesbury, 1398-1421. The work looks rather later, however. The panels are adorned with Perpendicular tracery heads. On the moulding is the rose, while the cornice has T. P. and carvings of dog, cock, eagle, etc.

Hillfield retains in its modern pulpit several old panels with Perpendicular tracery which probably belonged to the original pulpit.

Stourton Caundle possesses an excellent wooden pulpit which belongs in all probability to the close of the fifteenth century. It now stands on a modern stone base. The panels have good tracery. Originally it was coloured, according to Hutchins, the framework being red picked out with black, and the panels blue and gold. Unfortunately no traces of colour now remain. Hutchins also mentions the base of the screen, of which no traces now survive.

Sturminster Marshall has a fine late Perpendicular pulpit which came from Brigstock, Northants, from which it was ignorantly discarded some years ago, when it was purchased by the present Vicar of Sturminster Marshall (the Rev. J. Cross). The base has been lowered and the steps are modern. A painted panel of Henry VI. is now fastened to the inside. It is not known to what this panel originally belonged. Probably it was part of a screen. It was purchased with the pulpit.

Winterbourne Monkton has a modern pulpit in which are preserved two linenfold panels of early sixteenth century date. Winterbourne Whitchurch possesses a richly carved and painted pulpit which came from Milton Abbas. The

colouring has been renewed in red, gold and green. The cornice is well carved, and on the panels are niches with modern figures of the four Evangelists. There were formerly several shields, one of which had the five wounds, and another two flaming torches in saltire or. This pulpit was sold by the churchwardens of Milton Abbas in 1743.

REREDOSES.

Of the wealth of reredoses of wood, stone and alabaster, which formerly adorned, in such rich profusion, the parish churches of England, only a few examples in a more or less mutilated condition remain. There can be no doubt that originally almost every parish church in Dorset possessed one or more such reredoses, but at the present day (apart from the noble altar screen at Milton Abbas, which being of stone does not come within the limits of this paper) only one has survived, though luckily in a wonderful state of preservation. solitary example is the wooden triptych of the fifteenth century in the almshouse chapel at Sherborne. The sill of the east window in the chapel is at an unusual height above the altar table, and the wall space thus obtained is occupied by this triptych, which is probably Flemish work of the second half of the fifteenth century, and was in all probability presented to the chapel by some benefactor. The exterior of the two wings is embellished with four Apostles, on the right SS. Peter and Thomas, on the left SS. Paul and James. Five subjects are portrayed on the inside, all relating to acts of healing by Our Lord. The central portion is completely occupied by the Raising of Lazarus, and the scene is very finely portrayed. In the background are the walls of a city and a noble Gothic church. Above this scene is the Eternal Father with a long beard, and vested in cope and tiara. Two miracles are represented on each wing, one occupying most of the space, while the other is in the top outside corner, and on very much smaller scale. The right wing has Our Lord raising the widow's son at Nain, above which is the raising of the daughter of Jairus. Behind the window in the first scene is an Austin Friar. This is an interesting feature,

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since the original foundation of the almshouse was for the Austin Friars, and this certainly gives support to the theory that the triptych was originally intended for its present The left wing has Our Lord casting out a devil from the dumb man, while in the top corner is the healing of the blind man. The colouring is very good and brilliant, and it has been carefully restored. The drawing is very good, and superior to contemporary English work. It is an oil painting on oak, and the surface consists of a thin ground of whiting. The dimensions are as follows:—centre, four feet two inches long by three feet three inches high; the wings are one foot eleven inches wide by three feet three inches high. framing, which seems to be original, is quite plain except for a simple moulding. Dorset is fortunate in possessing so perfect a specimen of a mediaeval altar piece. An excellent account of this precious relic is given in Wildman's History of Sherborne.

Frequently the reredos was of alabaster, and consisted of a series of carved panels, usually richly coloured, and contained in a painted oak frame with wooden shutters, which could be closed in Lent. These reredoses were largely carved at Nottingham, and a considerable number were exported to France and other countries. A beautiful example exists at La Celle in Normandy, which retains the frame and portions of the painted shutters. At Wambrook, transferred from Dorset to Somerset in 1896, are seven pieces of boarding with painted inscriptions which may have formed part of the frame of such a reredos. From the nature of the inscriptions it is clear that the reredos would consist of scenes from the Passion. The inscriptions are as follow:--"Hic dant ei alapas"; "Captus est"; "I.H.S. Crucifixus est"; "Resurrexio Domini"; "Nicodemus ad sepulcrum"; "Pilatus lavat manus"; Another is defaced. The alabaster of which such reredoses were made came from Chellaston in Derbyshire. Possibly the carved and painted wooden panel at Chideock, which is described in another part of this paper, formerly belonged to a reredos.

STALLS.

There are but few remains of mediaeval stalls in the county. Doubtless originally there were numerous fine sets of stalls in the various religious houses and principal parish churches throughout the county, but the destruction has been very complete. The Franciscan church at Dorchester possessed a set of "fair stalls" at the dissolution in 1538, and the Dominican Priory at Weymouth had recently been embellished with new stalls when the worthy friars were driven out in the Even the fine Jacobean stalls of Wimborne Minster, which were erected after the fall of the central spire in 1600, were cut up and mutilated in 1855 and the succeeding years, losing their beautiful canopies in the process. only churches in Dorset which now can show any prereformation stall work are Bere Regis, Bradford Abbas, Milton Abbas, Sherborne and Whitchurch Canonicorum, all of which is in a more or less fragmentary condition. The remains at Bere Regis and Bradford Abbas are very fragmentary, and that at Milton Abbas is very plain and rude in execution. We will give a brief account of the surviving examples in alphabetical order.

Bere Regis has two very plain stalls on the south side of the altar. They are somewhat dilapidated and devoid of any ornamentation. The seats are fastened down. Though so very plain, it is unlikely that they date back further than the end of the fourteenth or beginning of the fifteenth century.

Bradford Abbas retains in the reading desk two stall-ends with elbow rests of good workmanship. They are probably late fifteenth century in date and coeval with the benches.

Milton Abbey possesses a number of plain choir stalls with misericords of very simple design. They are returned against the east wall of the pulpitum, but have lost their canopies, and have been considerably restored. Two quaint panel paintings, probably of the end of the fourteenth century, are placed on each side of the screen door. It is probable that they originally formed part of the wainscot of the stalls. One

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represents the founding of the Abbey by King Athelstan, who is represented presenting the model of a church to a kneeling monk, with these words in black letter, "Rex Atelstan huj' loci f." The other panel represents a queenly figure with a hawk, said to be Athelstan's wife. According to Hutchins there was formerly another painting, next the latter, of the Annunciation, with the angelic salutation "Ave Maria, gracia plena Dominus tecum," and Our Lady's reply, "Ecce ancilla Domini fiat m'i se'dum verbum tuum." This has unfortunately quite disappeared. When Hutchins wrote, three canopies remained on each side above the return stalls. Two modern canopies were erected by Scott in 1865 and incorporated fragments of the original work. The desks and subsellae are entirely modern, and no portion of the original work remained at the time of the restoration.

Sherborne Abbey still retains, amidst much modern work, some portion of its ancient stall work, which probably dates from the rebuilding of the choir after the fire in 1436. Five stalls, with misericords well carved, remain on each side of the choir. The canopies and wainscot are modern, done by Carpenter at the restoration, though apparently some old material was worked in. These canopies do not harmonize with the stalls, as they are of fourteenth century design. The baberies are well carved with a variety of subjects, and the work is well preserved. None of the old desks now remain, but the modern work is fair.

At Weymouth there is an old chair in the possession of the Corporation which is stated to have belonged to the Dominican Priory. It is, however, obviously, for the most part, of seventeenth century date, except a panel at the back, which may have come from the Dominican Church. This panel has a large lion rampant and above a cardinal's hat, and may possibly have formed part of the wainscot of the stalls, since we know that the Black Friars placed new stalls in their church shortly before the dissolution, and the panel may well belong to that period,

At Whitchurch Canonicorum there is some linenfold panelling in the choir stalls. There is also a nice carved cresting surmounting the wainscot, and several carved ends are incorporated in the modern work. These ends have elaborate flamboyant tracery, somewhat resembling the chest panels at Loders. The wainscot has good linenfold panelling of early sixteenth century.

MISCELLANEOUS.

Before concluding this paper something must be said about three examples of Dorset church woodwork which are probably unique, or at any rate very rare, in the country at the present time. We refer to the tablet at Chideock, the tabernacle for the reservation of the Blessed Sacrament at Milton Abbas, and the wooden staircase at Stratton, which are luckily in good preservation and excellent examples doubtless of fittings which must have been comparatively common in pre-reformation times. We cannot be too thankful that one example at least of these fittings has survived until the present day. We will now briefly describe these three interesting pieces of mediaeval woodwork. In the sacristy of the Roman Catholic Church at Chideock is preserved a carved wooden tablet representing the Holy Family. It retains some colour, and is about 12 inches square. It is said to have come from Whitchurch, Hants, and probably formed part of a reredos. The tabernacle at Milton Abbas is now fixed to the west wall of the south transept in the Abbey Church. It is in the form of a wooden spire with beautiful traceried lights. The base is square, and above this are two octagonal stories surmounted by a tapering pinnacle. There are traces of colouring, and it has been carefully repaired. In the base is the opening through which the pyx was placed. It belongs to the fifteenth century.

At Wells Cathedral there is another wooden canopy which is said to be a tabernacle; but this is rather doubtful.

The remarkable wooden staircase at Stratton now serves as the approach to the belfry, and is fixed in the south-west

corner of the tower, but it is extremely doubtful whether so elaborate an erection originally served this purpose. church at Stratton was completely rebuilt, with the exception of the tower, in 1891, and consequently it is now impossible to know whether there was originally a stone staircase leading to the rood loft. If there was not such a feature, it seems probable that in this wooden staircase we have a unique survival of a wooden rood stair, such as may be seen at Lambader and other places in Brittany, as well as at Villemaur in the Department of Aube. In England it was usual to have the approach to the rood loft in the thickness of the wall; but there are several cases where there are no traces of such a feature having ever existed although there is or was certainly a rood screen. The noble church at Salle in Norfolk is perhaps the best instance of this; but there unfortunately all trace of the wooden staircase has disappeared. The Stratton staircase is contained in an octagonal wooden turret, which is supported on a carved pillar of wood from which springs some fan vaulting. The panels of the turret are in two tiers, and are adorned with the linenfold pattern. Those at the top are modern, and it seems probable that the turret has been increased in height in order to serve its present purpose. The date of the work is early sixteenth century, and it has been carefully restored, and the upper panels harmonize with the old ones below. Whatever may have been its original use, this staircase is undoubtedly one of the most interesting remains of mediaeval woodwork in the county of Dorset.

Before concluding this paper it may be as well to note that there are one or two instances of pre-reformation oak chairs remaining in Dorset churches. Probably the best examples are at Cerne, where there is one on each side of the chancel. They are in good preservation, and probably belong to the first half of the sixteenth century. Whether their origin is domestic or ecclesiastical it is somewhat difficult to decide. Many churches in the county possess seventeenth and eighteenth century chairs, often of good design, but most of them are clearly of domestic origin.

POST-REFORMATION WOODWORK.

The following lists enumerate the principal remains of postreformation woodwork in Dorset which date prior to the year 1800.

Benching.

Caundle Purse Folke -Haydon Leigh

Puddletown West Stafford

Melcombe Bingham

FONT COVERS.

Charlton Marshall Folke Haselbury Bryan Winterbourne Kingston

Pulpits.

Abbotsbury*; Beaminster; Bradford Abbas; Caundle Purse; Cerne Abbas* (1640); Charlton Marshall* (eighteenth century); Charminster (1635); West Chickerell (1630); Over Compton*; Dorchester All Saints†; Dorchester St. Peter; Folke†; Frome Vauchurch; Hammoon; Haselbury Bryan (eighteenth century); Haydon†; Holwell†; Iwerne Minster; Lyme Regis* (1613); Netherbury; Portesham; Puddletown (with backpiece, but no tester); Spettisbury; West Stafford; Tarrant Crawford; Tarrant Rawston; Todber; Trent (Flemish sixteenth century work); Upwey; Whitchurch Canonicorum; Winterbourne Came (1624).

STALLS.

Wimborne Minster (1608), (Fine, but dreadfully mutilated).

^{*} With backpiece and tester.

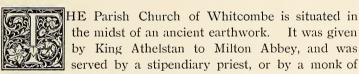
[†] With late type of linen panels.



Motes on Whitcombe Church.

By the Rev. M. PERSSE MATURIN, M.A.

(Read February 21st, 1922).



that foundation. Originally spelt Witcomb, or Widecomb, its tenure by the Abbot of Milton is referred to in Domesday Book. On the dissolution of the Monasteries it came to the Crown, and was granted to Sir Thomas Tregonwell. After various changes, the advowson has passed into the hands of the Earl of Portarlington, in whose gift it now is. For a long time it was a Donative; but, under the Benefices Act of 1898, it became a Perpetual Curacy. There is no house of residence, and the income is, as it has been for a considerable time, £13 a year. For many years past it has been held by the Rectors of Winterborne Came in plurality. Amongst those who, during recent years, have held the Incumbency was William Barnes, B.D., the famous Dorset Poet. The Dedication is unknown.

The church is 13 feet wide (inside measurement), the length is about 70 feet, of which the nave measures 39 feet and the chancel 18 feet, the massive tower being 13 feet square.

Тне Роксн.

The entrance porch in the South West has a thirteenth century arch, though the doorway itself is Norman. The north doorway, which is built up, is also Norman, and indeed may be of the Saxon style of architecture.

THE WINDOWS.

The East Window is of thirteenth century date; the hood-moulding is original, and is an exceptionally good specimen. The windows both on the north and south sides of the church are of the fifteenth century. In the head of the north chancel window are preserved some fragments of fifteenth century glass.

THE CHANCEL.

The floor of the chancel was originally lower than it is at the present time. There was formerly a Rood, which was removed in 1561, when the space between the rood-beam and roof was filled up, forming a tympanum. The chancel itself is of thirteenth century date. On the south side of the Altar is a bracket which probably once held the image of the patron saint. The *mensa* of the Altar is of stone, though no traces of the consecration crosses are to be found. The lower part of the Holy Table, and the Altar Rails are Jacobean.

NORTH WALL.

Against the north wall of the nave, which is probably the most ancient part of the church, a portion of it possibly dating back to Saxon times, are two extensive frescoes. The western one represents crocketed arcading. The arches were probably once filled with figures of saints, though no trace of them now remains. The other fresco is a very fine St. Christopher, who bears the Christ-Child on his shoulder and is walking through the water. The details are somewhat indistinct; but the Child holds an Orb in His left hand, while His right hand rests upon the head of the giant. In the water may be seen a large mermaid. In the top right-hand corner

there appear to be some hieroglyphics; but they are too high up to be decipherable. These frescoes were discovered during the restoration of the church which took place in 1912.

FONT. 1413093

The Octagonal Font is of the twelth century. It is supported by five shafts, of which only the central one is original. The bowl of the font is of Purbeck marble and measures 30 inches in diameter. Each panel is adorned by shallow arcading, rudely traced, and entirely devoid of ornamentation.

Bells.

The Tower, the grilles in the windows of which are remarkably good, at present contains two bells. They bear the inscriptions "Hope well: 1610. I. W." and "Love God: 1610. I. W." There is a tradition that there were originally three bells, and that one of them was removed for renovation; but nothing is known of it. Where it went to, and what became of it is a mystery.*

Parish Registers.

There is nothing of exceptional interest in the Registers; but this may be explained by an entry to the effect that "Whitcombe Old Register was burned in the large fire which happened on the 15th day of April, 1776."

CHURCH PLATE.

There is an Elizabethan chalice and paten cover. The date, according to the Hall-mark, is 1572, and on the cover is inscribed 1573. There is also a silver paten, with foot, seven

^{*} Cf. Proceedings, Vol. XXIV, p. 120, where Canon Raven states that the bells "hang north and middle in a three-bell frame. As there is a sequence of tones the tenor is probably the missing one."

Cf. also *Proceedings*, Vol. XXVII, p. 122, where it is stated that, according to a List of Bells in Dorset Churches, temp. Edward VI, 1552, preserved in the Record Office, Whitcombe Church at that date had *two* bells. (Editor).

inches in diameter, which is inscribed:—"The Gift of Mrs. Lora Pitt, Widow, to the Church of Witcomb in Dorsetshire, 1739."† The donor was daughter of A. Grey, Esq., of Stinsford, and married George Pitt, Esq., of Strathfieldsaye, who was possessed of the Manor of Whitcombe. The church also possesses a nineteenth century silver flagon, with cross on cover, $10\frac{1}{2}$ inches in height.

THE OLD CROSS.

Amongst the great treasures of the Church are the two blocks of stone preserved in the doorway now built up. This was the Priest's door, and is of fifteenth century date. These stones were excavated some years ago from the East Wall, and were originally parts of a Churchyard Cross. They are decorated with a beautiful and elaborate interlaced design. A photograph of them is given in Vol. XXXIII (p. xvii) of the *Proceedings* of our Field Club, They are said to be of the tenth century. Sir William St. John Hope pronounced them to be parts of a very fine churchyard cross of Saxon work, and, to the best of his belief, unique in Dorset.‡

In addition to these, outside the S.W. Porch are to be seen the step with the socket and a portion of the shaft of an old Stone Cross. It is merely a fragment measuring about 32 inches in height from the base. It has been assigned to the thirteenth century. A photograph may be seen in Mr. Pope's Stone Crosses of Dorset.

[†] Nightingale's Church Plate of Dorset, p. 53.

[‡] Cf. also Proceedings, Vols. XXX, p. xliv; XXXIII, pp. xvi and xxii.

^{||} *Ibid*, Vol. XII, pp. 52, 53.



The evidence for an Anglo=Saxon Mint at Bridport.

By HENRY SYMONDS, F.S.A.

(Read 21st February, 1922).

BOUT fifteen years ago I read before the Field Club some observations on the Anglo-Saxon and Anglo-Norman coins issued at those Dorset towns which held the privilege of working a mint,

namely, Dorchester, Bridport, Wareham and Shaftesbury. (*Proceedings*, XXVIII, 159). When speaking of Bridport in this connexion I said, on page 164, that

"it is somewhat remarkable that, although the western borough presumably struck money during the reigns of the Confessor and Harold Harefoot, no coins of these two kings have been noted, and it is only under William I or II that Bridport is known to have added her quota to the nation's currency."

The object of the present paper is to draw attention to a recent investigation by a philologist who proposes, with much reason, the re-attribution of certain Anglo-Saxon pennies, thus making good the hiatus in the coinage to which I alluded in the passage just cited. It will be convenient at this point, seeing that the written evidence is derived solely from the

Domesday survey, to translate from the Exchequer text the entry referring to the town in question.

In Brideport in the time of King Edward (the Confessor) there were 120 houses. It was responsible for all the service of the King and paid land-tax for five hides of land, that is to say, half a mark of silver to the use of the house-servants of the King, exclusive of the customary dues which belong to the farm of one night*. In that place there was one moneyer who rendered to the King one mark of silver and 20 shillings when the money was changed. Now there are in that place 100 houses, and 20 are so dilapidated that those who remain in them cannot pay the land-tax.

In the Numismatic Chronicle for 1921 (5th Series, I. 92). Mr. L. Woosnam writes concerning those pennies of Æthelred II and Canute which have been hitherto assigned to Bridgnorth in Shropshire, and urges on philological grounds that they should be transferred to Bridport as their place of origin. It was in 1846 that the Swedish antiquary Hildebrand published the catalogue of Anglo-Saxon coins in the royal cabinet of medals at Stockholm, and therein assigned to Bridgnorth the coins bearing the form of place-name to be presently mentioned. The second edition of Hildebrand's book in 1881 made no change in that respect, and his attribution was followed in the British Museum catalogue of Saxon coins (Vol. II) in 1893. Other authors also accepted the Swedish interpretation, with the exception of one writer in 1910, who, incidentally and with doubt, suggested the alternative solution which is now definitely put forward. I will here briefly recapitulate the main arguments in the Numismatic Chronicle and append a few comments of my own which will, I venture to think, carry the case a little further.

The "Bridgnorth" coins of Æthelred II show the names of four moneyers, the town name being variously abbreviated as BRYD, BRYDIA, BRYGIN, BRYDIGA and BRYIDGE; those of Canute

^{*} This phrase denotes the obligation on certain manors to provide hospitality for the King and his retinue for the period stated.

show two moneyers who rendered the town name as BRY and BRYD. It should be added that the Stockholm catalogue assigns no coins to Bridgnorth after Canute's reign.

Mr. Woosnam contends (1) that the Old English name of the Shropshire town was Brycge or Bricge, and quotes early literary examples of such readings; (2) that although the letter D occurs, as will be noticed, in the majority of the inscriptions on the coins, this letter did not form part of the word "bridge" until long after the Anglo-Saxon period; consequently a placename containing D could not be identified with Bridgnorth; (3) that the last mentioned town was not a Domesday borough, and no proof was forthcoming of the existence of a mint there, either in 1086 or at any other date; (4) that, on the other hand, the coin inscriptions point to a name such as BRYDIGAN or BRYDIAN which corresponds more closely with the BRIDIAN (Dorset) included in the Burghal Hidage list of fortified places in Wessex (circa A.D. 910). This BRIDIAN has, however, been identified, with some hesitation, as Little Bredy, by Professor Maitland in his Domesday Book and Beyond (p. 503), but the suggestion of that remote village can scarcely be maintained in face of the fact that Bridport was a Saxon borough and therefore a probable unit in the Burghal Hidage scheme of defence; (5) that Bridport was possessed of a pre-conquest mint, as we have seen, and its post-conquest coins are well known to students.

So far Mr. Woosnam, with whose conclusions I respectfully agree.

There remain two numismatic points which should, I think, be considered in addition to the philological evidence. Among the coins assigned by Hildebrand to Bridgnorth is a penny of Canute struck by the moneyer WATAMAN whose name I recognised as also occurring on a Dorchester penny of Harold I which is now exhibited. A further examination of the Stockholm catalogue discloses, in the reigns of Canute and Edward the Confessor respectively, two Dorchester coins by HWATEMAN, a name which is from an etymologist's point of view the same as that on the "Bridgnorth" specimen. Then

I notice a coin of Harthcanute by the same moneyer with the mint-name reading BR, which Hildebrand, rather inconsistently, assigns to Bristol instead of Bridgnorth, as might be expected from his earlier attribution. And, again, in the British Museum catalogue of Norman coins (1916), this moneyer's name can be seen on a penny of William the Conqueror reading BRI, which is also given to Bristol.

The inference to be drawn from the foregoing coins struck by WATAMAN is that they strengthen the case for returning to Bridport the things which are her's, because we have this craftsman working at the mint in Dorchester under several Anglo-Saxon kings, and the same name recurring on coin's with BR and BRI, which abbreviations suggest Bridport at least as readily as Bristol. It may be that WATAMAN was moved from Dorchester to the western borough, or vice versa, as instances are known elsewhere in which one moneyer was presumably employed at two neighbouring mints; but it is also conceivable that there might have been two local men of the same name and calling, say, father and son. Another relevant point is the fact that an entry in Domesday Book records the name WATEMAN as a Dorset land-holder in the time of Edward the Confessor. This documentary proof of the existence of a man bearing that name in the middle of the eleventh century corroborates the attribution based on the coins themselves, and also supports the generally accepted opinion that the status of a Saxon or Norman moneyer was above that of a mechanic.

To sum up, if Mr. Woosnam's criticism as to the alleged mint at Bridgnorth under Æthelred II and Canute is justified by the evidence, as I believe it is, then I think that the later coins by WATAMAN reading BR and BRI should also be transferred from Bristol to Bridgort. I am able to add that Mr. G. C. Brooke, the author of the British Museum catalogue of Norman coins, approves the conclusion at which I have arrived.



Priest's Chamber on Lyme Regis Bridge.

By WYATT WINGRAVE, M.D.

(Read 21st February, 1922).



HE Buddle or Lym as it empties itself into the sea is crossed by a bridge of probably two arches which carries the main street to the Charmouth road. At this point it was so narrow that in 1913

its widening was effected by removing some dilapidated cottages on its Southern side. One of these cottages was built on the arch itself; two others, a fossil and a fish shop, on its abutments.

During the demolition the writer was privileged to discover, on the South-western side, indications of an ecclesiastical building. Through the Surveyor's courtesy these were carefully examined, measurements taken, rough sketches made, and portions of masonry with timber preserved.

On the seaward or South abutment of the Western arch was a chamber whose floor was about the level of the bridge crown, measuring 20 feet by $19\frac{1}{2}$ feet. There were indications of a lower chamber, extending to river level; but the vertical extent was alone indicated by a sill or cornice of worked stone.

In the South wall was an arched recess suggestive of an aumbry, whose opening measured 27 inches vertically and horizontally. The stones were 11 in number, in rough ashlar, but with fairly close joints. The keystone was loose, and broke the true arc. In texture the arch stones were a coarse buff gritstone, similar to those forming the Eastern (unexposed) arch of the bridge. The *sill* was in one piece of Blue Lias. The *recess*, whose walls were composed of rough unworked fragments of Lias with wide joints, was 15 inches deep, and afforded no evidence of moulding for shelf, nor perforation for piscina, although there was a small gap behind the sill which suggested a drain.

A sketch was made at the time which shews the arch in situ.

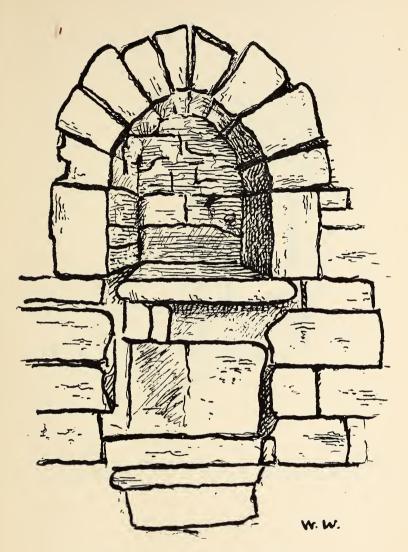
On removing the plaster from the North wall of this chamber a substantial timber (oak) framework was exposed, with no corresponding aperture in the wall, to which it was securely fastened by mortar. It is worked only on one aspect, its wall side being rough. There is no evidence of distemper or colouring; and the wood, although decayed in parts, is sound where carved.

In the South wall, below the probable floor of the main chamber, was a square opening which was found to afford access to the "kitchen midden," full of rabbit, sheep and ox bone fragments. This aperture was partly filled by Dutch bricks, many of which were found in the cottage walls.

The Arched Recess probably served as an aumbry, there being no reliable evidence of a drain. It was probably lined by plaster and wood, and furnished with a shelf and door.

The Oak Framework is difficult to account for. Its situation—if original—excludes the question of its being part of a reredos. Still the chapel may not have been oriented.

With regard to period, the aumbry is strongly suggestive of twelfth or early thirteenth century, contemporary with the Eastern and older arch of the bridge. Further, the materials correspond.



Arched Recess (Aumbry) from Priest's Cell, Lyme Regis Bridge. (Destroyed 1913).



Wood Tracery from Priest's Cell, Lyme Regis.

The wooden tracery belongs to a later period, probably late thirteenth or fourteenth century.

Thus this was probably a priest's cell or chamber, such as it is customary to find attached to early bridges, whose custodian, in addition to his religious duties, would collect the bridge tolls and salt-dues belonging to the Abbot of Sherborne.

For a long time no reference could be found which threw any light upon it, not even any local tradition. But last year, on examining some old wills, the writer found a distinct reference to it. In the Will of John Tudbold (1548), a wealthy merchant of Lyme, there is mentioned "a Chamber in which our Lady's Priest sometime dwelled in" and "I commit to the discretion of the Mayor for the time being and his Brethren to bestow it as they shall think best, for a Priest if they shall have any serving for our Lady's Service, or else to bestow it on two poor people."

A codicil makes it even plainer:-

"One burgage with the appurtenances situate and lying within King's Lyme which I late bought of John Tilling, and also one house called the Customs House with a *Chamber on the same site and lying next to the Bridge of Lyme beforesaid.*"

Thus we have a clear evidence of our Priest's Chamber, situated on the Bridge as private property, immediately following the Reformation, which clears up any doubt as to its early history.

The stones of the masonry were carefully numbered, and are now temporarily reconstructed in the Museum, with the wood tracery.



Ancient Stained Glass in Dorset Churches.

By E. T. LONG.

(Read February 21st, 1922.)



HERE can be little doubt that the ancient parish churches of Dorset were liberally supplied with stained glass before the pillage and destruction of the sixteenth and seventeenth centuries. Pro-

bably the majority of the churches had every window filled with glowing colours, portraying the Gospel story, the lives of the Saints, and other sacred events connected with the history of the Catholic Church. Only a pitiful remnant of all this beauty has survived to the present day, though it is necessary to remember that its destruction is not entirely due to the fanatics of the sixteenth and seventeenth centuries. A large portion fell a victim to the neglect and ignorance of the eighteenth and early part of the nineteenth centuries. A perusal of the pages of Hutchins will serve to show how great has been our loss in the last two centuries. Hutchins tells us that the fine range of Perpendicular windows in the north aisle of Hilton Church retained its old glass until c.1730, when it was all destroyed by some idle persons. Again, he describes

the east window of Ibberton as portraying the life of St. Eustace, the patron of the church. No traces of this now exist. The old glass mentioned by him at Sturminster Newton probably disappeared in 1827, when the church was largely The glass in the clerestory of Sherborne Abbey was removed when the present glass was inserted in the middle of the last century; but some of it, at least, remains in a chest in the parvise over the porch, and will, it is hoped, be inserted in the restored Lady Chapel. When Hutchins wrote it was much more extensive, however. Several churches lost fragmentary portions, even during the second half of the nineteenth century, places so affected being Affpuddle, Cheselbourne. Mappowder, Stoke Wake, West Orchard. It is sad to think that precious fragments have been lost within comparatively recent times. Dorset does not now take a very high place in English counties for the amount of old glass remaining, but there is no reason to suppose that it was inferior to other parts in pre-reformation days. Before proceeding to give a brief account of the surviving glass, it will not be amiss to say a few words on the origin and composition of painted glass in general.

The use of glass in windows has been traced back to at least the first century of the Christian era; but it seems improbable that painted glass was known before the fifth or sixth centuries, when St. Gregory mentions stained glass windows at the church of St. Martin at Tours. The earliest surviving glass in England does not date further back than the twelth century. Probably the best and most extensive remains of early glass in this country are to be found at Canterbury Cathedral, where it survives in much better condition than is usually the case. Perhaps the most outstanding feature of this glass is the darkness and opaqueness of the colours, which must have rendered the small windows of the Norman churches all but useless for admitting light. This early glass was formed of very small pieces, of which the largest is rarely bigger than the palm of the hand. The drawing is of course very rude, but the colours are rich, and the general effect is

imposing. In fact the twelth century work is often much more satisfactory than that of the next century.

The windows of the twelth century may be divided into the following groups; (1) Jesse, (2) Medallion, (3) Figure, (4) Rose. The Jesse window was popular at all periods, but never more so than in the twelth and thirteenth centuries. It consists of a recumbent figure of Jesse at the bottom, from which grows a vine, containing in the branches oval spaces, in which are placed kings, the maternal ancestors of our Lord. On either side of these kingly figures is a prophet holding a scroll with his name, while at the top is our Lady and the Holy Child. Sometimes, in the early examples, our Lord is placed at the top alone, and is represented as a seated figure. Canterbury Cathedral preserves the remains of a twelth century Jesse window.

The medallion window is undoubtedly the most common in the early work. This type contains several panels with figures or groups, each contained in a circle or rectangle, and the intervening spaces are filled with scroll work of an intertwined and foliated nature.

In the next century the figures tend to become more natural and less stiff, while the foliage assumes a more naturalistic form. Purple and red are very favourite colours, and the windows are often exceedingly monotonous and flat in their effect. As in the preceding century figure windows may be divided into four kinds; (1) Jesse, (2) Medallion, (3) Figure, (4) Rose. Early in the century we notice the use of grisaille, which consists of white glass painted with foliated designs on a crosshatched background, which insured more light, and thus obviated one of the greatest disadvantages of the preceding period—its opaqueness. Salisbury and Lincoln Cathedrals retain portions of Jesse windows of the period, but in a fragmentary condition.

The following century also largely employed Jesse windows, and a famous example remains at Dorchester Abbey, near Oxford, where the figures are partly on the glass and partly carved on the tracery of the window. Figure windows tend to

become increasingly popular, but the Rose and Medallion types are much less frequent than in the thirteenth century. The figures are surmounted by architectural canopies, and often consist of two rows completely filling the lower lights of the window. Sometimes, however, the bottom part consists of ornamental designs or coats-of-arms placed upon grisaille. In the tracery lights are usually censing angels with our Lord in Majesty in the centre, also the Apostles, or the Evangelistic symbols. During this period the use of Lombardic lettering is abandoned for black letter characters. The colours are much lighter than in the twelth and thirteenth centuries.

The fifteenth and first half of the sixteenth centuries witnessed the culminating point of stained glass, and nothing can exceed the beauty and richness of the colouring and the sumptuousness of the canopy work. The tendency throughout this period is towards greater pictorial effect; and the artist rather than the glazier begins to take first place, in consequence of the larger pieces of glass employed. The use of quarry windows became very common. These windows consist of small diamond shaped pieces of glass each decorated with a device in the centre, such as the IHS or MR, and occasionally birds or flowers, and even heraldic devices. Sometimes the whole window consisted of quarries, especially in small clerestory lights. At other times the spaces between figures or groups were decorated in this manner. In England, the Tudor rose was frequently employed for this purpose, and Dorset possesses several fragmentary instances of this use. In the figure windows the canopy is practically always employed, except in the case of the Crucifixion, when the figures of our Lady and St. John usually stand on brackets or quarry backgrounds. In the latter windows however it is not uncommon to find the figures in a window completely isolated with simple backgrounds of white glass. In subject windows there are usually low canopies, and the backgrounds are for the most part red or blue alternately. A very noticeable feature of the period is the use of white glass, which helps to emphasize the richness of the coloured portions by way of contrast. The use of vellow stain for figures and emblems was extensively employed with charming effect. Towards the end of the fifteenth century the influence of the Renaissance began to make itself felt, and the earliest example of this in England is to be found at Fairford in Gloucestershire, where the whole series of 28 windows remains practically intact. At first the change is confined to more accurate drawing and pictorial effect; but soon the canopies and other architectural features assume classical forms, until by the middle of the sixteenth century practically all traces of the Gothic spirit have departed, and Roman lettering takes the place of black letter. These Renaissance windows have a wonderful richness of colour, and the effect is truly magnificent. The glorious chapel of King's College, Cambridge, possesses the most complete set; but excellent examples survive at Balliol and Queen's College Chapels, Oxford, and in the parish church at Basingstoke. The latter, which is fragmentary, came from the ruined chapel of the Holy Ghost, just outside the No one who really understands the principles and object of stained glass can doubt for a moment that the period from 1450 to 1550 was the most glorious in the annals of this art, and the most productive of the best results. No one who. after examining the interesting and well-preserved late thirteenth century glass in the choir of Merton College Chapel, Oxford, turns round and contemplates the exquisite fragments of the late fifteenth century work in the great west window, can hesitate to award the palm to the latter.

In the beginning of the seventeenth century a decline set in, and the colours began to be enamelled and fixed by fire, and the beauty of the art was, to a great extent, lost, though good work was sometimes produced well on in the seventeenth century, especially in Normandy and Flanders. Oxford Colleges possess some good examples of Flemish work of the first part of this century. In the eighteenth century and well into the nineteenth the art sank to its lowest depth of depravity, and nothing can exceed the ugliness of the early glass of the Gothic revival. It was not until the latter part of

the nineteenth century that any really good stained glass was produced. The honour of reviving the ancient glories of this lost art may be said to belong to Mr. J. N. Comper, though Kempe produced much fine work also, at a slightly earlier date. Mr. Comper has not only produced glass worthy to rank with the fifteenth and sixteenth century work, but also designed numerous magnificent churches, and above all a vast number of sumptuous fittings which take their place with the best examples of the golden age of church architecture—the fifteenth and sixteenth centuries. No one who has seen the church of Wimborne St. Giles can doubt for a moment that it is the inspired work of the greatest architectural genius which England has produced since the so-called reformation. This church possesses several examples of Mr. Comper's stained glass.

Dorset retains no portion of twelth or thirteenth century glass. Practically nothing survives of the next century, except some fragments at Wootton Glanville, which are contemporary with the fine window in which they are placed. Probably also some of the fragments in the east window at Bradford Peverell belong to the extreme end of the century. came from New College, Oxford. Almost all the remaining glass is of the fifteenth century, although some fragments at Melbury Sampford belong to the sixteenth century, as is proved by the remains of an inscription; and Margaret Marsh has some small pieces dated 1515. At Cerne Abbas and one or two other places are shields which probably belong to the beginning of the sixteenth century. A few instances of postreformation armorial bearings survive, as at Melcombe Bingham, Milton Abbey and Ibberton. The finest surviving old glass is at Melbury Bubb and at SS. Johns' Hospital, Sherborne,

A noticeable feature of the remaining old glass in Dorset is the scarcity of canopy work. Of course there was no doubt originally a considerable quantity; but it seems probable that the figures were frequently placed on quarry backgrounds or architectural brackets; and the comparatively frequent remains of quarries with roses, suns, etc., rather go to confirm this theory. Another interesting fact, worth noting, is the existence of some Flemish glass in the churches of Mapperton, Upwey, and Wimborne Minster, while Trent has sixteenth and seventeenth century glass from Cologne.

We will now proceed to describe very briefly, in alphabetical order, the surviving ancient painted glass of Dorset.

ABBOTSBURY.

In the south aisle is a beautiful female head, probably of St. Katharine. There is also a shield of St. George.

BEER HACKET.

There is a shield with the arms of Sherborne Abbey in the porch, which was formerly in the east window.

BRADFORD PEVERELL.

The north window of the chancel contains the Coronation of Our Lady and part of an Annunciation. The east window has some angels, saints and borders, which came from New College Chapel and are probably late fourteenth century. In the third window on the north side of the nave is the shield of William of Wykeham surrounded by the Garter.

CAUNDLE PURSE.

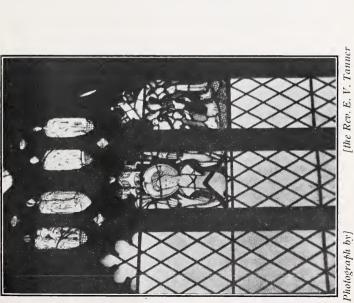
There is a lion rampant on a field semée of crosses crosslet and the words "John Longe"; also another coat-of-arms in the south-east window of the chancel. The east window of the north chapel contains an eagle with a scroll inscribed "Scs Johēs," also some remains of canopy work.

CERNE ABBAS.

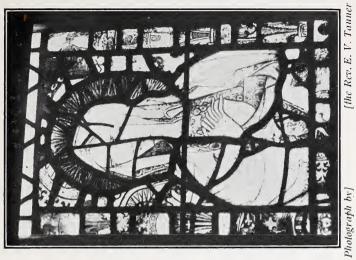
The tracery of the east window, which probably came from the Abbey Church, contains a number of shields of early sixteenth century date.

CHARMINSTER.

There are slight remains in the tracery of the east window of the south aisle.



Melbury Bubb: Fragment of the "Seven Sacraments" Window.



Abbotsbury: Glass in South Aisle.



CRANBORNE.

In a window of the south aisle are fragments of old glass, including a shield with the arms of Clare, Earl of Gloucester, a crowned female head, a mitre and other fragments.

HAZELBURY BRYAN.

The east window of the chancel has a feathered seraph, two coats-of-arms and several Tudor roses and suns. The rich colours, in red, gold, and blue, of the roses are very effective. In the east window of the north aisle is an angel with Matheus on a scroll, also an eagle with Joannes, and below are the remains of canopy work. The north-east window contains in the tracery three seraphim standing on wheels, while below in the main lights are portions of canopy work. The next window has in the tracery four shield-bearing angels, and below some canopy work. The adjoining window retains three shield-bearing angels, and in two of the main lights portions of canopy work. On the shields are respectively I.H.S., M.T., and S.I. The T possibly stands for John Tonkere, rector 1426-42. In four other windows are slight traces of old glass.

HOLNEST.

In the tracery of the nave windows are some roses.

IBBERTON

The south-west window of the chancel contains quarries on which are the arms of Milton Abbey. The window has a border with I.T. in yellow on blue reading from the bottom to the top. These are probably the initials of John Towninge, rector 1452-78. In the west window, among other fragments, is a winged lion, with a scroll inscribed "Marcus." In the tracery of the east window are two tonsured heads. Formerly this window contained the life of St. Eustace, patron of the church. In the north aisle are some post-reformation armorial bearings, including the royal arms of Queen Elizabeth.

IWERNE MINSTER.

The west window of the north aisle contains some quarries,

LODERS.

The south-east window of the south aisle contains in the tracery a Bishop and two female saints, while the south-west window has St. Leonard and another ecclesiastic unidentified. In the north-west window of the nave is a Tudor rose in the tracery.

LONG BURTON.

A few fragments in the tracery of the windows.

LYDLINCH.

There are four feathered angels, now lying loose in the vestry, but formerly in the tracery of the east window of the chancel.

MAIDEN NEWTON.

Slight traces remain in a window of the south aisle.

MAPPERTON.

A considerable quantity of old glass is to be found here, most of which is of foreign origin. There are numerous coats-of-arms, some foreign, but the rest belong to local families; amongst others being those of Horsey, Brodrepp, Cheverell, Morgan, Paulet, Russell, Strangways. These are said to have come from the Manor House. Some good figures exist, which are said to have come from the Netherlands, and include a Crucifixion, the Prodigal Son, a Bishop, and a lady in sixteenth century dress. The following dates occur:—1509, 1615, 1616, 1632, 1652. Much of the glass was bought in London in 1768 by Richard Brodrepp, who gave £10 0s. Od. for it.

MARGARET MARSH.

In the west tower window are fragments, including a crown, two lilies, four leopards heads, "Margareta" on a scroll, and the following imperfect inscription—"Yong qui hanc fenestra' mill'imo qui' ge'tesimo XV."

MARNHULL.

Some slight remains in a window of the north aisle.

MELBURY BUBB.

The glass here is the best remaining in the county, and dates from the latter half of the fifteenth century. In the west window are the 12 Apostles with emblems, also remains of the Last Supper with a scroll "Coena Domini," and the head of a knight upon a scroll "Orans Patrem." There are various other fragments besides, including the emblem of the Trinity. The western window on the north side contains in the tracery the five wise and five foolish virgins with scroll inscribed as follows: "quing: prudentes;" "quing: fatue." "Date nobis de oleo vestro quia lampades nostrae extinguuntur. Ne non faciat nobis et vobis, ite potius ad vendentes et emite vobis." The foolish virgins hold their lamps upside down. In the central light below is the upper part of a figure of Christ crowned with thorns and displaying the sacred wounds, from which flowed the blood to the panels, on either side and beneath, which contained the seven sacraments. Only Ordination has survived; and above the scene, which is finely portraved and in which are nine ecclesiastics, is a scroll with the word "Ordo." The next window has the Annunciation, and St. Gabriel holds a scroll with "Ave gratia plena Dnus tecum," while Our Lady has a scroll inscribed "Ecce ancilla Dni fiat mihi secundum verbum tuum," while above is the Holy Ghost. There are also various fragments in other windows. east window are the Evangelistic symbols, scrolls inscribed "Dnus Walterus Boteler Rector ist. loci," and several shields and other fragments.

MELBURY SAMPFORD.

Several of the windows contain old glass, including shields, chalice and host, mitre, etc., and a figure with a modern head. In the west window is the following restored inscription; "Orate pro bono statu Joh'nis Criche rectoris hujus eccl'ie anno d'ni 1547."

MELCOMBE BINGHAM.

In the east window of the south chapel is some good glass in the tracery with SS. Augustine and Jerome, in doctors' robes with round caps, and holding books. In the south nave window is a monogram I H, and in the north window two birds and remains of canopy work. There are fragments in the north and east windows of the north chapel. The south chancel window contains an angel with the Turges shield, also a fish, and other small fragments. Some of this glass is said to have been removed from Milton Abbey c.1789.

MILTON ABBEY.

The east window of the choir contains the shields of Trenchard, King Athelstan, Hussey, and Arundel, some quarries with W, a crozier and three rudders, also W.M. with a crozier, and a kneeling monk. The initials doubtless stand for the famous Abbot Middleton. In the north window of the transept is some eighteenth century armorial glass of very poor design.

MINTERNE

In two windows of the nave are slight traces of old glass.

OKEFORD FITZPAINE.

The north east window of the north aisle contains some fragmentary portions, including a merchant's mark, also a fleur-de-lys, the initials RR and slight remains of a black letter inscription with other fragments.

PUDDLETOWN.

Some very slight remains in a window of the north aisle.

SHAFTESBURY ST. PETER.

In the east window is a figure of Our Lady kneeling at a desk, shields of the Trinity and the Five Wounds, and two coats-of-arms.

SHERBORNE ABBEY.

There is a box of fragments preserved in the chamber over the porch. These fragments were originally in the clerestory windows of the choir, and were removed to make way for the present glass in 1858. Among other pieces are several heads and other portions of figures, also some large Tudor roses in yellow stain, a pelican, and a large portion of quarry glass. The colours are very rich, especially the reds. The glass still retains its leading. Probably the majority dates from the end of the fifteenth century and early part of the succeeding century. Among other fragments is a head of Christ from a Resurrection with the top of a streamer showing. It is proposed to insert this glass in the windows of the restored Lady Chapel.

SHERBORNE HOSPITAL OF SS. JOHN.

The south window of the chapel retains some good late fifteenth century glass, including Our Lady with the Holy Child, with the patrons of the hospital, S. John the Evangelist and St. John Baptist, on either side, and the instruments of the Passion and the sacred monogram. In the tracery are the Evangelistic symbols.

STRATTON.

A few traces of old glass remain in the south-east window of the nave.

TARRANT CRAWFORD.

Some fragments exist in the north-east window of the nave, and were discovered under the floor at the restoration.

THORNFORD.

In the south-east window of the chancel are part of the figure of St. Stephen, another head, and three birds yoked to a harrow. This glass is in yellow stain.

TRENT.

In the east window of the north chapel are slight remains of fifteenth century glass. The east window of the chancel contains a quantity of sixteenth and seventeenth century glass of German origin. The best dates from 1519 and represents Our Lady and the Holy Child. Among other figures and scenes are fine panels of St. Margaret, and Christ appearing to

St. Mary Magdalene, as well as numerous others of varying merit. Some of the latest ones are very poor. Some portion, at any rate, of this glass came from a monastery of Crutched Friars at Cologne, as is proved by an inscription on one of the panels. The glass was inserted by a former Rector.

UPWEY.

In the west window are six fragments of old glass, including I.H.S. The east window has some poor Flemish glass, probably of the seventeenth century, with Our Lady, St. Barbara, SS. Peter and Paul, also a small panel of the Crucifixion.

WIMBORNE MINSTER.*

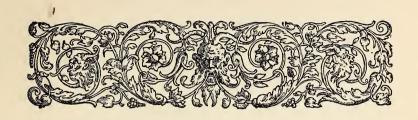
The east window of the chancel possesses some good Flemish glass portraying the Tree of Jesse, which belongs to the fifteenth century. The glass has been mutilated and the figure of Jesse is missing. The blue, which predominates, is very beautiful.

WOOTTON GLANVILLE.

The south windows of the chapel contain various fragments, including two fifteenth century angels, with a bird and some small portions of fourteenth century glass. There are also four small figures of German or Flemish origin, probably seventeenth century work.



^{*} There is also a fragment of old glass inserted in the east window of the ancient Lepers Chapel of S. Margaret and S. Anthony, at Wimborne, (now used as a chapel for the inmates of the adjoining almshouses). Ed.



A Calendar of Manuscripts relating to Manors in Sturminster Marshall.

Compiled by HENRY SYMONDS, F.S.A.

HE collection of ancient deeds and other writings owned by the Field Club and housed in the Dorset County Museum has recently been increased by a welcome gift from Major Mackintosh of

Alderholt Manor, who has presented the manuscripts briefly described in the following pages. The deeds are, with very few exceptions, in admirable condition and unusually free from injury by damp or rodents. The early seals, too, remain unbroken in the majority of instances.

Those who are interested in Sturminster Marshall will find, I think, some material for a few amendments and many additions to the history of the manors within that large parish as set out in *Hutchins*, Vol. III, pp. 336—368.

The present list will be supplementary to the similar calendar printed in our *Proceedings*, Vol. XXXII, p. 95.

CORFE MULLEN.

2 Nov., 30 Henry VIII (1538). Charter by Richard Phelypps of Charborowgh, *armiger*, confirming to Thomas Whytte of Poole, merchant, a moiety of Hyllands and Langelande in Corffmolen and Corffhubart, with the lands, etc. appertaining. Latin. Seal, a little broken.

- 22 Aug., 1610. Martyn Whyte of Wimborne, esquire, and Henry his brother; lease on lives to Ellis Tremer of Thorncombe of a water grist mill and land.
- 11 Aug., 1612. Martyne White of Wimborne and Mary his wife; lease to William Byles, of Childeockford, of tenements and land.
- 11 Aug., 1612. Martyne White, Sir John Hanham of Wilkesworth, knight, and Thomas Hanham of Morton; lease to Joseph Byles and John Younge, both of Sturminster Newton Castle.
- 20 April, 1624. Martin White of Huish, Somerset, esquire; lease to Thomas Flooke, of Corfe Hubert, of one ham of meadow.
- 11 May, 1628. Martyn White of Fittleford, esquire; lease to Thomas Morrice of Wimborne, clothier, of a house and lands.
- 25 Sept., 1632. The same; lease to William Mayo of C.M., yeoman, of a house and lands.
- 25 Sept., 1632. The same and Thomas his son; lease to John son of William Hobbye of C.M. and Elizabeth his wife, of a house and lands.
- 25 Sept. 1632, The same; lease to Mary, widow of Edward Hellyer and Mary her daughter, of two closes. (Memorandum endorsed 1665).
- 6 June, 1637. Thomas White of Cliffe, Dorset; lease to Thomas Hanham, of Wimborne, of a moiety of the manor of Corffe Hubard. (Memorandum endorsed 28 Aug., 1637).
- 28 July, 1659. Ralph Bankes, lord of the manor of C.M.; lease to Robert Husey of C.M. and Susanna his wife, of a house and lands.
- 30 March, 1664. The same; lease to Daniel Cherrett, of C.M., of a house and lands.
- 26 June, 1665. Sir Ralph Bankes of Corff Castle; lease to Clifford Hussey the elder of C.M. and Margaret his wife, of one close.
- 28 June, 1671. The same; lease to Robert Hussey of C.M.

1 March, 1710. Lingham Asterley of London, mercer; lease to John Lavie of London, merchant. (Memorandum endorsed).

MANOR COURT BOOKS, ETC.

(1). Court book in cardboard cover, 12in. by 8in. Entries from 1661 to 1707, during which period the lords were Sir Ralph Bankes, Sir Geo. Curtis, Sir Wm. Portman, John Fitch and William Fitch, successively. A few copies of the court roll are inserted, the earliest being 1615, 3 August, when Martin White, farmer, Sir Geo. Raleigh, Sir Edw. Grevyle, Sir Rich. Varney, Sir Rich. Chitwood and Richard his son, and Alban Butler were the lords of Corffe Hubard manor.

In 1657 William Ettrick was steward to Ralph Bankes.

(2). Draft manorial survey, in paper cover, 16in. by 10in., of lifehold lands, etc., in 1816.

LYTCHETT MINSTER.

16 Jan., 42 Elizabeth (1599-1600). Nicholas Lockier and Thomas Browninge, both of L.M., convey Organt House to John Cheeseman in tail male, with remainder to his brothers William and Julyan successively in tail male; whom failing, to the heirs of Robert their father.

STURMINSTER MARSHALL.

- Tuesday in the feast of SS. Simon and Jude, 22 Edward III (1348). Charter by John Andru granting a tenement, curtilage and lands to Master William de Lude. Five witnesses. Given at Wynterborne Clenchestone. Seal. Latin.
- The Assumption of B.V. Mary, 24 Edward III (1350). Charter by Master William de la Lude granting a tenement, curtilage and lands to John Clement of Stormynstre Marchal, chaplain. Six witnesses. Given at Stormynstre. Seal. Latin.

- Monday, the morrow of the Holy Trinity, 14 Richard II (1391). Charter by John Plecy, senior, granting lands to John de Wardon, which he had by the feoffment of John Faber, chaplain of Sturmenstre Marchall and which were once the lands of John Andrew, chaplain. Ten witnesses. Seal. Latin.
- 3 Jan., 16 Richard II (1392-3). Release and quit-claim by William Plecy to John Wardon concerning lands which the latter held by feoffment of John Plecy. Five witnesses, Seal. Latin.
- Friday in the feast of St. Valentine, 3 Henry V (1415-16). Indenture of lease by John Wardon and Cristina his wife to William Lake junior, otherwise Hikeman, and Edith his wife, of lands formerly held by John Faber and John Andrew the chaplain in Sturmynstre. Six witnesses. Two seals. Latin.
- 6 April, 5 Henry VI (1427). Charter by Henry Chawsey of Wiltshire (sic), John Aleyn, chaplain, William Say and Henry Biccombe, granting to Robert Heryng and Roland Hynton all their manor of Hymbury in S. M. and Corfmoleyn which they had held by the feoffment of the said Robert Heryng. Seven witnesses. Four seals, one being broken. Latin.
- 11 Sept., 9 Henry VI (1430). Indenture by John Bryce of Wymborne Mynstre, yeoman, and Henry Caveler, clerk, concerning one third of a tenement and $4\frac{1}{2}$ acres of land in S.M. Three witnesses. Two seals. Latin.
- 28 Feb., 26 Henry VI (1447-8). John Dorchester, prior of Christ Church, Twynham, and the convent there, acquits and indemnifies Robert Rempstone of Godlyngston in respect of rent payable to Sir Theobald Gorges for the manor of Hymbury. Seal, centre portion only. Latin.
- 23 Jan., 1 Edward IV (1461-2). Charter by John Brice and Joan his wife of Wynbourne Mynstre, granting to Henry Bosom and Edith his wife a tenement and lands in S.M.,

- lately John Faber's otherwise Clement's, with land and a rent at Lychetmynstre, formerly John Andrew's the chaplain. Two seals, one broken. Latin.
- 17 Nov., 24 Henry VII (1508). Charter by Edith Lockyar, widow, the daughter and heiress of John Peers, granting to John and Rowland Morton and John Mychell all her lands in the parish and manor of S.M. Five witnesses. Seal lost. Latin.
- 18 Jan., 17 Elizabeth (1574-5). Thomas Phelipps of Montague, Somerset, *armiger*, and John his son and heir apparent, release to Robert Stone of S.M., yeoman, 45 acres in the manor there. Sealed by John Phelipps only. Latin.
- 20 Jan., 36 Elizabeth (1593-4). Thomas Moorton of Henberrye, leases to five trustees by way of jointure for Mary his wife, Henbury farm and lands elsewhere. Seal lost.
- 20 July, 1614. Court of wards and liveries. A grant to Thomas, son of Thomas Morton of Henbury, deceased.
- 29 Sept., 1618. Christopher Ancktyll of Almer, esquire, leases land to John Clarke of S.M.
- 5 Oct., 1622. John Harding of S.M. and Fraunces his wife, a co-heiress of John Stone, agree to convey to Christopher Harding of S.M. certain lands.
- 10 Jan., 1623. Edward Bucket of S.M., clerk, and Anne his wife, a daughter of Thomas Morecocke, grant to Christopher Harding of S.M., two tenements parcel of the manor.
- 24 May, 1651. Christopher Harding the elder, yeoman, and Barbara his wife, a co-heiress of John Stone, covenant with their son Jonathan to levy a fine for settling their lands.
- Six chirographs of Fines relating to the Hardings. (A bundle).
- 9 June, 1656. William Adams of London, esquire, and Thomas his son, lease to Thomas West of S.M. a cottage and land parcel of their manor. Memorandum endorsed 1687.

- 17 June, 1663, Thomas Adams of Battersea, esquire, leases to Roger Burt of S.M. a cottage and land parcel of his manor.
- 1 Sept., 1666. Thomas Adams of Battersey. Copy of will and codicil.
- 24 Aug., 1672. Christopher Harding of S.M., yeoman, and Jonathan his brother. Articles of agreement.
- 1 Sept., 1672. Bartholomew Lane of Wimborne Minster assigns to Jonathan Harding of S.M. a moiety of Westly farm.
- 20 May, 1673. Charles Morton of the Close of Sarum, leases to William Hayward the right of turbary on Hymbury Heath.
- 20 Aug., 1676. Jonathan Harding of S.M. Probate of will.
- 1 March, 1683-4. William Lenthall of Burford, Oxon, and John Harding of S.M. Lease of a moiety of Westly farm.
- 12 March, 1689-90. Thomas Adams of Battersea leases to three trustees his manor of S.M., otherwise Moor Court, in trust for his wife Margaretta Maria.
- 13 April, 1699. William Doe of Gishedge, Dorset, mortgages to Samuel Langdon an annuity arising out of the manor of S.M.
- 20 Oct., 1699. Francis Fulford of Fulford, Devon, leases a a house to John Gilbert the elder of S.M.
- 8 Feb., 1702-3. Jonathan Harding of Guldeford, Surrey, conveys land to Richard Coldham of the same place, for the purpose of effecting a common recovery.
- 12 Feb., 1702-3. Exemplification of the recovery last mentioned.
- 10 July, 1706. William Fitch of High Hall. Bond to Awnsham Churchill.
- 13 Oct., 1707. Awnsham Churchill of Henbury, leases to John Harding a part of Westley farm.
- 30 Oct., 1753. The same. Lease to John Laws of S.M.
- 28 Nov., 1767. The same. Lease to Thomas Pinchard of S.M.

MANOR COURT BOOKS, ETC.

- (1). The earliest item consists of three sheets of foolscap paper dated 13 Oct., 1627, and containing a survey of the manor of Sturminster Marshall, Sir George Morton, baronet, being then the lord. The capital value, apparently for the purpose of a sale, is stated to be £4,188 4s. 6d., exclusive of the liberty of fishing and fowling and the "game of swanns" upon the Stour, and of the timber on the demesne, which is estimated at £400. The surveyor believed the tenure to be in socage.
- (2). A book in parchment cover, 12in. by 8in., containing entries relating to the court-baron of Moore Court from June, 1663, to February, 1701-2, followed by stray records of two courts held in 1704 and 1708 respectively. The remaining pages are blank. Thomas Adams, *armiger*, was the lord until September, 1689; subsequently his place was taken by the trustees for his wife, who were succeeded in 1704 by Awnsham Churchill.
- (3). A book in cardboard cover, 13in. by 8in. This volume is composite in character, the result of binding together several thin books, loose sheets of accounts, copies of court roll, etc. There are presentments at Moore Court from 1663 to the end of that century; possibly these are the original entries in English which were subsequently translated into Latin in book (2) above mentioned, but it is doubtful. I also find a survey dated 1681. The surrendered copies of court roll disclose the names of two owners of this manor who are otherwise unknown, namely, Daniel Eliott in 1628, and Sir John Melton in 1638. Among the miscellaneous papers is an account showing that "Madam Adams's" yearly income from Moore Court in 1703 was £143—18s. Od.
- (4). A book in parchment cover, 8in. by $6\frac{1}{2}$ in., containing a survey of the manor in 1653 by William Ettrick then steward. At the other end are various memoranda in another hand,

- (5). A book in parchment cover, 12in. by $7\frac{1}{2}$ in. Survey taken in 1663, with later notes.
- (6). A book unbound, 13in by 8in. A survey not dated. but probably in the eighteenth century.
 - (7). A draft survey in 1816.
 - (8). A plan of Moore Court farm, 1705. Two plans (rolled) of the river Stour at Sturminster Marshall, one dated 1804.
 - (9). A parcel of loose accounts, letters and papers relating to the estate, chiefly eighteenth century.

The names of the successive lords of Moore Court manor. as deduced from the foregoing books and documents, appear to run thus:--

John Morton, d. 1521. Thomas Morton. George Morton. Daniel Eliott.

Sir George Morton, knight. Sir George Morton, baronet. Sir John Melton.

Dame Margaret Melton. William Adams. Sir Robert Adams Thomas Adams. Trustees of Margaretta Maria Adams. Awnsham Churchill, 1704.

I understand that Canon Mayo intends to discuss some of the above-mentioned documents in a future issue of S. & D. N. & O. We shall therefore look forward to reading his comments.



The Distribution of the Order Hymenoptera (Insecta) in Dorset

with suggestions as to the limiting causes.

Mansel-Pleydell Prize Essay, 1922, By F. H. HAINES, M.R.C.S., L.R.C.P., D.P.H.



HE mild, temperate climate, and varied inland and coast conditions of the 625,578 acres of Dorset, render this county very suitable for a study of distribution, faunal or floral, in a confined Palae-

arctic area. The county, for this present purpose, may be considered as divided transversely into three lower-lying parts by the chalk ranges of the North and South Dorset Downs: the North Downs stretching from Cranborne Chase to beyond Dorchester, and the South Downs extending through the Isle of Purbeck to Beaminster. Between the North Downs and Wiltshire lie the Middle Oolite formations of the Vale of Blackmore. Between the North and South Downs lie to the east the Bagshot and Reading Beds of the Great Heath: by which name I shall intend the stretch of heath which includes Poole Harbour, Purbeck (north of the Purbeck Hills), Parley and Hern Heaths, and is bounded on the north-east by the Stour. To the west it will extend to and include Puddletown

Heath. Between the South Dorset Downs and the sea are Greensand, Gault, Wealden and the Upper Oolitic formations in Purbeck, Corallian Beds and Oxford Clay near Weymouth, and Lower Oolitic and Lias formations towards Devon. The coast presents in succession all the varied scenery of mud flats, sand-hills, cliffs of Portland Stone, Chalk, landslips of Greensand and Kimmeridge Clay, saltings, shingle and Midford Sands. Lower Oolitic Beds spread from north to south beyond the range of the Chalk in the west of the county and Lias strata still further west.

Poole Harbour, Purbeck, Portland, the Chesil Beach and the various gorse-covered or wooded Greensand eminences, as Pilsdon Pen, toward the Devon border, are well characterised areas, with more or less marked faunal and floral peculiarities. An extremely important feature, also, is the belt of Lower Eocene strata (London Clay and Reading Sands) which runs from Cranborne in the north-east to Yellowham Wood, there bending south to Broadmayne to turn east to Wool and then south to East Lulworth. This area includes many of the best woodland collecting grounds in the county: a small part of the Chase, Holt, Morden, Bloxworth, Oakers Wood and Affpuddle, Yellowham Wood, West Knighton Wood, wooded stretches near Owermoigne and the reach of wood from Wool and Coombe Keynes to East Lulworth.

The areas which will best represent hymenopterous distribution may therefore be thus indicated:—I. The district north of the great central chalk uplift, including the Vale of Blackmore: chiefly Oxford Clay. The nature of the hymenopterous fauna is well reflected in the records from Glanvilles Wootton, II. The Chalk, an area of breezy upland and down, more broken than is usual in other chalk districts: Blandford, Dorchester and Chaldon may be taken as character-Such insects as Osmia bicolor from Cranborne istic localities. and Chaldon: Lyda flaviventris from Cranborne: Evania fulvibes from Piddletrenthide: and Tibhia minuta, Stelis aterrima and Cratomus megacephalus from Blandford have occurred here. The Great Heath, comprising tracts of heath, heather, III.

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gorse and bracken, fir-woods and peat swamps. Studland, Winfrith and Puddletown Heaths have been largely used as collecting grounds to illustrate this wild and undulating area, IV. The Lower Eocene belt (London Clay and Reading Sands) is a well wooded stretch: Bloxworth, Yellowham Wood, Wood Street and East Lulworth are localities. V. The Coastal area, including Purbeck, south of the Purbeck chalk range, and as a sub-district, Portland with the Chesil Beach. This division contains varied formations, but the fauna is predominantly of a coast character. Records from Swanage. Lulworth, Ringstead, Abbotsbury and Lyme Regis will indicate the nature of the fauna. Megachile maritima and argentata, burrowing in sand, occur here, but inland also, especially if sandy, the latter even in woods. The very rare and local ericetorum occurs at Portland and versicolor at Arne, but in woods too, nesting in sand and stumps. VI. The Lower Oolitic and Lias areas of the west of the county: a special feature being the Greensand eminences of Pilsdon Pen. Lewesdon Pen, and several others. The high state of cultivation of much of this neighbourhood has impoverished it entomologically, and records of any very characteristic or local Hymenoptera appear almost wanting. Osmia leucomelana and Trichiosoma lucorum occur, as do such hymenopterous insects as affect cultivated tracts, e.g., Andrena albicans, nitida, nigroaenea and wilkella, Cephus pygmaeus and its parasite, · Collyria calcitrator. Mosterton, Netherbury, Marshwood, and Wootton Fitzpaine will yield specimens as examples of the VII. The river beds of the county, and adjoining fauna marshlands.

Scarcely any Hymenoptera inhabiting ponds and rivers, all the interesting problems presented by a fresh-water fauna are nearly absent in their study, except in connection with the curious Trichopteron-parasite, *Agriotypus armatus*, and with certain *Proctotrypidae*, parasitic in the eggs of dragonflies, alderflies and other fresh-water insects and with a few other cases,

There is often a great identity of plant growth and of insect life on the alluvial deposits along the course of a river and the marshes at its side, whatever formation it be flowing over. Yet there may be a wide diversity in the flora with parallel changes in the fauna in different areas of river drainage. The more important physiographical will, of course, follow the geological features: rolling downs are generally identified with a chalk sub-soil, woods with clay, and heathlands with sand and gravel. In all cases, cultivation and the acts of Man will be the great disturbing factor, which will tend to reduce the comparative significance of the natural influences. He drains marshes and fens, cuts down forests, and burns the heaths. while his flocks and herds closely graze the down-lands. he may cover all the landscape with houses, factories and military and other training and playing grounds, to the almost entire obliteration of the whole native fauna. The forms that can survive the disturbances caused by agriculture and the tendency to a dull uniformity of conditions, produced by it. are comparatively few. Certain insects, some of them hymenopterous, like Cephus and Eriocampa among the sawflies, are well-known pests of the agriculturist and gardener. With them will be found those parasites, often hymenopterous too. that keep them in check. Such an incident as the draining of a fen means the instant annihilation of millions of the forms peculiar to such a district. So the planting of a heath with forest means the replacement, more or less entire, of the heath fauna unless open spaces or some original features be left. The burning of commons and forests, again, may mean such an alteration of conditions as to introduce an entirely new series of species, animal and plant. Birch will replace pine. bracken, or still more, grass will grow at the expense of the heath, heather and, most of all, the gorse, that before flourished on equal terms. The abundant growth of the fireweed or rose bay is noticeable after a fire. De-afforestation causes lessened rainfall and a rise in temperature.

Though some more northern forms do occur, of course none strictly alpine can be expected in Dorset.

Sandy districts are notoriously rich in Aculeate Hymenoptera, partly, perhaps, because such districts being comparatively useless to Man, economically, are more untouched by him. Phytophagous species will be numerous in woods, entomophagous species will occur where their prev may be found, though this necessary condition may be still further qualified by other circumstances which make them local. The great ramparts arresting the spread of a fauna and flora, other than climate and artificial conditions, are mountain ranges, oceans, vast prairies or steppes and, to a lesser extent, large rivers and These large cosmic influences are plainly not to be considered in treating of Dorset. Yet so sedentary, fragile and local are some insects, such as certain of the Tineina and Diptera (and their hymenopterous parasites will obviously be limited by the limits of their hosts) that similar barriers, though on so small a scale as a stretch of heath, shingle, or a chalk ridge, will appear at times, if the fauna be examined intensively. to have a strong effect in restricting or modifying their range, even if not absolutely staying it. Some hardy and adaptable forms make headway in every place and are ubiquitous; but many species will only be found in sandy districts or on chalk, while a smaller number exclusively favour clay. Others are coastal, marsh, or fluviatile. The county has no true "fen" or "broad" area.

Dorset, as a part of Great Britain, will have derived its fauna in Tertiary times from the continent, when no ocean barrier intervened between France and England, or Scandinavia and Scotland. Besides these connections there is the former ridge of land, which is known to have stretched in Pleistocene times from the Mediterranean region to skirt the coasts of Spain and Portugal, joining the south-west of England from Hampshire to Cornwall, with a further extension to the south of Ireland, to be remembered. Hence the Mediterranean elements in the fauna and flora of Dorset, as well as other parts of south-western England, and the south of Ireland.

In glancing at the distribution of the Dorset Hymenoptera,

as set forth in this paper, it will be seen that a species may be, or appear to be, common, or rare, or local, or locally common or rare, or totally absent. But ignorance of its life history, its short span of life, or a dearth of hymenopterists, may mislead as to these facts. A species cannot be called local in its range if present everywhere, except where the actual necessities of its existence, as food and shelter, are lacking. Again, the same species may be common one season, rare another, or exhibit a periodicity through the effect of weather conditions acting upon the units of the species, or upon other species whose greater or less numbers affect it favourably or adversely. Or some other ontogenetic factor may be involved. explain the presence of a species at all in any place, enquiry must be made into the past history of the race, and the phyllogenetic factors. Every species originated from some centre and spread thence. England, with Dorset, will have been entered from the several sources already indicated. except indeed England and Dorset be themselves the places The conditions at the originating centre will of origin. naturally be those most favourable to the new species, and there will be harmonious adjustment between the new organism and its environment. Yet the causes which impel the spread of the newly evolved form to the regions around, or further, if the species be winged, are many. As with the human race. over-population is probably the chief of these, especially if the area be occupied by some competitive form which requires the same food and the same retreats. The presence of actual enemies, parasitic or predacious, would possibly be rather an influence of extermination than emigration, as would be the cannibalism that may arise when, the normal food failing, the starving individuals devour one another, as might occur among sawfly larvæ, if these behaved like some lepidopterous larvæ are known to do, or if more than one female ichneumon oviposited in the same larva through larval scarcity. As the specific range extends it will cover, in a succession of favourable seasons, areas from which it may again ebb through a continuation of less favourable times. A species tends to get

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scarce on the limit of its range and a northern species will get rare southwards, and vice versa, unless the climatic factor be adjusted by appropriate alterations of elevation, increased cover or food supply. Hence there may be a sporadic or interrupted distribution, a constant advance and retreat, or even an evolution of a local variety or new form better adapted to a changed habitat or to avoid the great pressure of direct Besides the bionomic, economic or meteorological conditions exerted on the periphery of range, the migratory instinct, however derived, will be another chief impelling cause of greater distribution. A species will sometimes appear in a place where it was never seen before and may never be seen again, perhaps in a locality which will connect two usually isolated colonies owing to some combination of favourable conditions. But the broken distribution may not necessarily mean intermediate extinction, but that the area has been peopled from different centres of dispersal, and the different streams have never met.

Gales, ocean currents, drifting timber, birds and other mechanical means are all quoted as factors of insect dispersal, irrespective of Man, who, at the present time, aids all natural methods of spread by the artificial means he introduces. Shipping, commerce, conveyance of goods, and especially timber, food imports and ballast may all lead to the introduction of new forms to fresh localities to establish themselves either temporarily or permanently, or perhaps to multiply, through the non-introduction with them of their natural enemies, to an inordinate extent, even leading to the extermination of some part of the native fauna opposed to them.

The species of the fauna of a country are bound to one another by a multiplicity of ties. The extinction of a host species will mean that of its hymenopterous parasite, unless there be an alternative host. If there be a symbiotic relationship both partners will suffer. So will any inquiline if the species with which it dwells perish. Collectors of hymenoptera have been far too few to have had any effect on the numbers of the objects of their study. Nor in this country

have such birds as the Honey Buzzard, Bee-Eater or Flycatcher caused any real diminution. Pheasants will devour large numbers of ants which, especially Formica rufa, destroy many other insects, e.g., sawfly larvæ. Game-preserving, here. will act both beneficially and adversely. Its influence in retaining certain tracts in a more natural condition is wholly beneficial to their insect fauna. Man seldom directly attacks any Hymenoptera other than wasps. Humble-bees' nests are occasionally pillaged for their honey by boys and still more by field mice. Spiders will kill many Hymenoptera. these agencies count for little, as a limiting cause, compared with those constituted by competitive forms and the internal and external parasites, or hyperparasites, which affect so many of the species. Special pecularities in the life history. habits, bionomics, and economics of every hymenopteron are of the greatest importance in determining range. long in the larval state and may be carried far in drifting trees at sea, or imported timber on land; ants sometimes largely depend on the secretions of aphides for food: sand-loving species may require sand to burrow in, sand for their cocoons. sand plants for their honey and pollen, or, if predaceous, sandfrequenting insects for their prey. Clay or chalk insects need soil of appropriate nature. The habit of suspended emergence saves many a race from extinction in a bad season. Close grazing and clean, or high, farming will be very detrimental to all phytophagous insects, and all those that are in any way dependent on such.

Nature herself by sea-inroads and sand and desert extension may destroy a fauna. Or a reverse process may take place, as is seen at Poole Harbour through the growth of the *Spartina* grass.

The distribution in Dorset of the several hymenopterous groups individually will now be spoken of, special attention being drawn to those habits that will, directly or indirectly, and considering their range elsewhere, have tended to their presence here at all, or the limitation of their occurrence in 1

the county; e.g., some bees are very restricted in their choice of flowers: the female of *Andrena lapponica* will only visit *Vaccinium*, hence it must shew an extreme localism in Dorset.

HYMENOPTERA ACULEATA: HETEROGYNA OR ANTS.

There are representatives of the four British sub-families. The first sub-family, the *Ponerinae*, archaic and mainly tropical and Australian, is represented by *Ponera coarctata* found at Swanage and on the West Lulworth cliffs. The species is a failing one. Its presence is largely determined by the food, warmth and shelter it may be able to obtain by being in the proximity of certain other ants, particularly species of *Camponotinae*.

All the Myrmicine genera save Formicoxenus and Anergates (recorded from Charmouth apparently in error by Dale) are found. Myrmicina graminicola is chiefly on the coast and on the Bagshot Sand. Formicoxenus nitidulus should occur, as it is present in the New Forest and at Bournemouth, in the nests of its hosts, F. rufa and pratensis. Monomorium pharaonis is an imported species found in confectioners' shops in Dorchester, limited to and requiring such conditions as are found in such places.

Solenopsis fugax is an inhabitant of south and central Europe and needs the mild conditions prevailing on our southern coast, occurring at Portland and Swanage. All the species of Myrmica and many of the varieties, save M. lobicornis, found, however, in the New Forest, are met with in Dorset. According to species, they occur both in wet and dry places and in diverse positions. Stenamma westwoodi, a south and central European species, finds a warm and congenial environment at Godmanstone, Corfe Castle and Studland. Only Leptothorax acervorum and L. tuberum of the five species of Leptothorax have been found as yet in Dorset: the former being well distributed in the county, the latter apparently confined to the coast. The nests occur in the earth, under stones, under the bark of trees, in rotten branches, and

in various other places. *Tetramorium caespitum* occurs along the coast and also inland at Wareham, preferring open sandy country.

The Dolichoderinae are represented in Dorset by Tapinoma erraticum, which occurs at Lulworth, Wareham, Studland, Chapman's Pool, Ringstead and West Knighton Heath. chiefly a species of dry, sandy places in the south of England. The Camponotine genus Lasius is found in all its six species in Dorset: L. fuliginosa, nigra, and flava being well distributed. L. flava is the common meadow ant whose hillocks are often such a conspicuous feature in pastures, affording a warm sunny nest. L. aliena is largely a coast species, but is also found on inland sandy tracts as at Morden. L. umbrata occurs at Swanage and mixta at Glanvilles Wootton in nests sheltered from too much heat. All the species of Formica. and many of the varieties, are Dorset except Formica rufibarbis. Formica rufa, the Great Red Wood ant, is extremely abundant in the shade of the fir-woods, but not confined to them. A hardy, omnivorous insect, it feeds on everything, from dead animals, insects and honey to the honey-dew and Its variety, rufa-pratensis, occurs in excreta of aphides. Dorset. Formica pratensis is found at Morden as well as in Hants. It recurs in Cumberland and Northumberland and one or two Scotch localities. Perhaps it is ousted by F. rufa. When two nearly allied species exist together, there appears often to be a tendency for one to replace the other. F. pratensis is a less pugnacious ant than rufa, not so well armed with formic acid, and needing more sun than its hardier ally. Formica exsecta is found at Lyme Regis and Poole. Its curious distribution is limited to the south-west of England and a few Scotch localities. Formica sanguinea, our only slave-making ant, occurs on Parley Heath. Formica fusca is common. variety glebaria is found at Weymouth, Swanage, and Portland, and its variety rubescens, at Lyme Regis. Formica picea occurs near Wareham.

FOSSORES OR SAND WASPS.

All three genera of Mutillidae are Dorset. Mutilla europaea is very common. It is found, too, as early as May, and as late as October! As so often happens in a favourable position in the range of a species, it extends from its proper habitat on sandy heaths to woods and even cultivated fields: just as some southern insects, confined to woods in the north will, ranging southwards, frequent lanes as well as woods and, more southward still, be found on open arid tracts. Predatory in the larval stage on the larvæ of humble bees, from the nests of which it may sometimes be bred in abundance, an adequate supply of the nests of Bombus are required for its welfare. M. rufipes occurs on Parley Heath; Myrmosa melanocephala at Glanvilles Wootton. Lulworth, Charmouth, Tadnoll, Moreton, Rempstone, and Parley Heath, and Methoca ichneumonides at Lulworth, Charmouth, Godlingston, and Lyme Regis. In its larval state it prevs upon the larvæ of Cicindela campestris; and the females may be seen around the burrows of this species so common on our heaths. It preys also upon C. maritima and perhaps on C. sylvatica. The presence of a species of Cicindela is therefore necessary for the species. Tiphia minuta (Tiphiidae) is found at Glanvilles Wootton and Moreton. Sabyga quinquepunctata (Sapygidae) occurs at Upper Bockhampton, burrowing in old posts. The Psammocharidae (Pompilidae), a sun-loving family, provisioning its nests made in sandy banks, with, usually, spiders stung so as to paralyze but not to kill them, is represented in all its British genera and sub-genera. A good supply of Araneae will favour this family. Aporus unicolor is found at Middlemarsh and Arne; Evagethes bicolor at Middlemarsh and on the Great Heath; Psammochares (Pompilus) rufipes on the Great Heath; P. plumbeus occurs along our sandy coasts, on Arne and Studland Heaths, and at Portland. It also occurs inland at Coombe Wood. P. niger is spread through Dorset, preferring sandy soils; likewise the very common P. viaticus. P. minutulus occurs at Upper Bockhampton and spissus at Oakers Wood, Moreton, and Glanvilles Wootton; P. chalybeatus occurs at Arne; P. gibbus in sandy

places throughout Dorset; P. unguicularis at Upper Bockhampton, Winfrith and Arne; P. westmaeli on Rempstone Heath and P. pectinipes at Tincleton and Parley Heath. Salius fuscus is very common. It appears to be more partial to woodland than some of these usually sand-frequenting insects are. It occurs at Glanvilles Wootton, Weymouth, Portland, the Great Heath, and the woods at Upper Bockhampton, Coombe Keynes and East Lulworth. S. affinis occurs throughout the Great Heath. S. exaltatus is common throughout the county; S. notatulus occurs at Glanvilles Wootton; S. obtusiventris at Charmouth and S. parvulus on heaths round Poole Harbour and at Swanage. Calicurgus hyalinatus occurs at Glanvilles Wootton and at Lulworth. Pseudagenia carbonaria is found in Yellowham Wood. This species makes its cells of mud, and is apparently another more wood-frequenting species, and less restricted to a sandy soil. Agenia variegata occurs at Glanvilles Wootton and at Portland. Hypsiceraeus (Ceropales) maculata is very common on Umbelliferae in the county. The super-family Sphegidae (including the families Sphegidae, Larridae, Trypoxylonidae, Astatidae, Nyssonidae, Philanthidae, Mimesidae, Oxybelidae and Crabronidae) is a group so large that any detailed account of the distribution of its species now is out of the question. Most of the genera chiefly affect sandy and heathy districts, and all provision their nests with other insects, often *Homoptera*, or spiders. We have in Dorset one of the two British species of Astata (Astatidae), found on all our sandy commons, two of the three British species of Tachysphex (Larridae) on our coasts and commons, the three British species of Trypoxylon (Trypoxylonidae) well distributed in bushy places, three of the four British species of Sphex (Ammophila, Sphegidae) common on the heaths, but not in other situations, the one British Spilomena (Mimesidae) at Glanvilles Wootton and Portland. and the one British Stigmus at Glanvilles Wootton, Portland and Winfrith. *Pemphredon* is a garden and woodland genus; and three of the five British species are very common; but a fourth, morio, is only found on Parley Heath. One or other of the three species of Diodontus should occur, and may be overlooked. The conditions present in the county should suit it. Their burrows, in sandy places, are stored with aphides. Three of the four British species of *Passaloecus* occur, nesting in bramble stems and rotten wood in the neighbourhood of woodlands. Psen (Mimesa) is a sand-loving genus: four of its six British species occur on the Great Heath, at Glanvilles Wootton and Charmouth. Of the Nyssonidae the one species of Arpactus, the two species of Gorytes and three of the four species of *Hoplisus* are Dorset. They prey on *Homoptera*:

Gorytes and Arpactus specially on Cercopidae, frequenting flowery places. They are fond of Umbelliferae. A. tumidus is largely a coast species in Dorset, occurring at Lulworth, Charmouth and on the Chesil Beach. Dorset has three of the four British species of Nysson, parasitic on Gorytes and its allied genera. They haunt woody spots where Gorytes is found, exploring the burrows of their hosts in old timber and other places. N. dimidiatus, parasitic on Arpactus tumidus, occurs near West Knighton Heath, at Lulworth, and in the woods between Wool and East Lulworth. Nysson spinosus attacks Gorytes mystaceus. The one species of Didineis occurs at Glanvilles Wootton and Lulworth, and is, also, probably parasitic on Gorytes, Both species of Mellinus (Mellinidae) are common: arvensis is abundant throughout the county, as is, but less so, sabulosus, in gardens and woods. Of the six British species of Cerceris (Philanthidae) three are Dorset: two found on the Great Heath, and one widely distributed in more woodland parts. The writer once found a large colony of C. arenaria on Warmwell Heath. All the nests were stored with the beetle, Otiorhynchus picipes. One female only, caught outside, held an Hypera. If such eclecticism is common, it might narrow the range of a species. The four species of Oxybelus (Oxybelidae) are represented by two in the county, which frequent, one rarely, the Great Heath, storing their burrows with Diptera. The genera Dinetus, Miscophus (Larridae), Diodontus, Psen (Mimesidae) and Philanthus (Philanthidce) are unrecorded. The 37 species of the four subfamilies of Crabronidae occur, except Blepharipus pubescens,

HYMENOPTERA IN DORSET.

B. styrius, B. carbonarius, B. aphidum, B. gonager, Ablepharipus bodagricus, Clytochrysus planifrons, Xestocrabro microstictus (larvatus). Acanthocrabro vagabundus, Thyreus clypeatus, Rhopalum kiesenwetteri and Lindenius panzeri. A. vagabundus may be overlooked. Certain species, as vagus and cribrarius, are in profusion throughout the county, the latter more restricted to sandy places, as are many species of the genus; but several are woodland, and vagus may be found on Umbelliferae and other hedgerow flowers on cultivated land. The writer once bred many specimens of it from cells in a block of rotten wood which seemed to have been stored with the fly Lucilia caesar and two other species of Muscidae. The Fossores, generally, keep to the same species of prey, whether it be coleopterous, dipterous, homopterous, or other. This restriction might. conceivably, limit their dispersal, as their prey would need its own particular environment. The species of Crabronidae burrow in the ground, in posts, rotten wood, and walls, according to kind, and are, as a rule, strongly attracted by flowers, particularly such Umbelliferae as Heracleum, Oenanthe and Angelica. Entomognathus brevis is generally distributed in Dorset.

DIPLOPTERA (WASPS).

Both the *Vespidae* (Social Wasps) and the *Eumenidae* (Solitary Wasps) are represented in Dorset. Six of the seven British species of *Vespa* are found. The exception is *arborea*, which occurs with *rufa* in a peculiar way, being in fact an early form of that species. The mode of its association suggests one way in which the inquiline habit may have originated. It seems to occur in localities where the competition of its kindred is less felt. No workers exist. *Vulgaris*, *germanica*, *rufa* and *sylvestris* are very common, *norvegica* being rarer but occurring at East Lulworth. The more primitive, bush-building wasps would, naturally, tend to be more local. As the older, they may have been superseded by the more recent forms evolved more exactly to harmonize with new and changed conditions. An old form might only maintain itself

where competition has been less severe and the influences leading to "the survival of the fittest" have been less felt.

The two typical ground-builders would be expected to occur more freely in less wooded districts: *V. rufa* and still more *arborea*, which approximate to the tree wasps, in certain respects, holding an intermediate place between them and the more woodland *sylvestris* and *norvegica*. *V. sylvestris*, however, has been known, though very rarely, to nest in the ground.

The westward distribution, towards Dorset, of the hornet, as a common insect, seems to end rather abruptly at Hern on the Hants border. In Dorset itself it is comparatively scarce, and only in exceptional seasons for the species, like 1919, are specimens met with in any numbers. It prefers a clay soil with woodlands, especially those with hollow trees in which it nests and hibernates. Outbuildings, e.g. the upper parts of hop-oasts in Kent, are also used for suspending its nest in. It rarely uses banks. It has occurred not only in such localities as Bloxworth, Moreton, and Glanvilles Wootton (commonly) but at Studland, and near Weymouth. The female may be found at times hibernating in thatch.

Such parasites as *Specophaga vesparum*, which occurs in Dorset and attacks the larvæ of wasps, and *Metoecus paradoxus* or *Velleius dilatatus*, if the latter be injurious to its host, are too rare to affect, seriously, the distribution of wasps.

Both genera of the Eumenidae, or Solitary Wasps, Odynerus and Eumenes, are Dorset. Of the 17 species of Odynerus, 13 are found in the county. They store their nests with small, green caterpillars, which they paralyze by stinging. Four species, parietum, pictus, parietinus, and antilope, build in crevices of masonry and woodwork, and are therefore apt to frequent houses and outbuildings, being well distributed and usually common over the county. Five species, spinipes, reniformis, herrichii (basalis), crassicornis and trimarginata, burrow in sand, frequenting heaths or coasts, the first two forming beautiful tubular entrances to their holes, but reniformis and crassicornis are not Dorset species. Spinipes and trimarginata are not rare in their haunts, but herrichii is found

nowhere else in Britain, and is very local on heaths between Swanage and Bloxworth, and at Portland. Callosus burrows in clay banks and is common throughout the county; tomentosus may have the same habit, but is not recorded. Melanocephala and laevipes nest in the hollow stems of brambles: the first occurs at Weymouth, the Chesil Beach, Lulworth and Ringstead; the second is rare in woods at Coombe Keynes and between Wool and East Lulworth. Trifasciatus, gracilis. sinuatus, and bifasciatus nest in rotten wood, oak-apples and similar places. The first three are fairly distributed, but the last is absent from Dorset. The single British species of Eumenes, coarctata, is very common on all our heaths, usually attaching its small round nest of mud to heath and heather. Perhaps the most interesting, from the point of view of distribution, of all the Dorset Hymenoptera is herrichii. South Dorset must be on the northern limit of its range and it occurs in rare, scattered, but occasionally, very populous colonies over a limited portion of the Poole Harbour section of the Great Heath. It chiefly frequents, for its tunnels, the barer sides of the rather indurated Bagshot Sand declivities found, here and there, in this neighbourhood. It may be a species of the so-called Mediterranean fauna, which survives in a limited area of the south of England and Ireland. Other remnants of it in Dorset that may be quoted, to stray for a moment from the particular Order under notice, are possibly the dragonflies, Oxygastra curtisii of the Hern neighbourhood and Sympetrum fonscolombii of the Great Heath, supposing this be native. Hippobosca equina, the Hants Calliprobola speciosa, Callicera aenea, Chrysophanus argiades, Hypena obsitalis, and Scybalicus oblongiusculus. Halictus quadricinctus may also belong, as may the Devon and Channel Island Callimorpha hera. The above route of immigration is well illustrated botanically, in the well-known case of the Ericaceae. Erica ciliaris occurs round Poole Harbour, in Cornwall, and Galway: abroad in Normandy and Spain; vagans in Cornwall, abroad in the west of France and Spain; mediterranea in Mayo and Galway, abroad in the west of France, Spain and the shores of the Mediterranean; Dabeocia polifolia in Connemara

and Mayo, abroad in the west of France, Spain and the Azores. The occurrence of wasps, like that of bees, is very dependent on climate and weather, but parasitic species of these latter, being more exposed, will suffer more proportionately than their hosts in shelter.

ANTHOPHILA (BEES).

Dorset only claims two of the seven British species of Colletes, the only genus of the Colletidae, the first of the eight families of British bees: glutinaus, Cuv. (succincta) and daviesana. Fodieus, picistigma, and marginata probably occur too, as they are found in both Hants and Devon. Succincta is a heath species, but the others favour such flowers as Seuecio, Tanacetum, and Matricaria; and marginata, clover. They burrow in softened masonry, clay and sand-banks. The combination of such conditions of food and dwelling will, probably, determine their presence in or absence from localities in Dorset.

Only four of the twelve British species of Prosopis (Prosopidae) are recorded: communis, signata, hyalinata and confusa, the first being very common. The last three occur at Winfrith and West Lulworth. All four frequent bramble flowers, like so many of the genus, which also occurs on Hieracium, Euphorbia, Achillea, Brassica and Reseda. They burrow variously in dock and bramble stems, but also less frequently in banks, posts, and the mortar of walls: e.g. signata. The nine genera of Andrenidae, save Dufourea and Rhophites. are represented. Of the 15 species of the parasitic genus Sphecodes ten are Dorset; and of course the distribution of these must be as narrow, and may be narrower than that of their hosts: bees of the genus Halictus. Two species, both Dorset, have exceptional parasitism: Sphecodes pilifrons attacking Andrena sericea (albicrus) and S. reticulatus attacking Andrena argentata. Of the 32 species of Halictus, 21 are Dorset. including the very local H. quadricinctus found at Portland. It is difficult to say how far such enemies as Sphecodes, whose species are almost invariably parasitic on Halictus, tend to

restrict its numbers or distribution. Four species of Halictoxenus (Strebsibtera), which attacks this genus, too, have been already described. By causing debility or damaging important organs they must militate against the affected species. four species of *Halictus* thus attacked are all very common Forty-five of the 63 Andrenae are distributed either generally or in accordance with their special requirements, locally, in Dorset. As an example of the way in which nearly related bees may differ in habits it may be noted that A.wilkella may be found in cultivated, clay soils, while afzeliella and similis frequent wild heathlands. There are one or two species curiously absent, apparently; such as A. thoracica and fulva. Yet fulva ranges over the metropolitan area, both on the Bagshot sand of Hampstead Heath, and on the London Clay. It is, perhaps, far too fanciful to suppose that the great chalk uplift which intervenes between the Lower Eocene of the London basin and the Lower Eocene of Dorset has arrested its progress, especially as it occurs at Oxford on Lower Oolite and at Monmouth on Devonian. Nor can the distribution of A. cingulata on our higher lands be very plausibly explained by supposing that it has spread either into Dorset, or out of it, along our Lower Oolitic formations and those of the Cotswolds which are continued to the Humber. Yet a route of such definite character might in certain instances conceivably influence the direction, degree, and facilities for dispersal.*

The writer has not found *A. cingulata* on our Dorset heaths, but it occurs on flowery, half-cultivated patches at Holme, on *Veronica*. A species appears to be more local when, as in the case of some migratory birds, the males arrive before

^{*} Since writing the above, I have found A. fulva at Wimborne, which extends Dale's Glanvilles Wootton record. It occurs on many soils. Plants and insects, originating on later formations, may, sometimes, persist in propitious areas on the earlier beds exposed (as seen at Houghton Stubbs) even when the later, super-incumbent, deposits have been quite denuded: just as they do on actual outliers like Blackdown (Eocene gravels) and Creech Barrow (Oligocene limestone).

the females, or, as in the case of some bees, the males appear first. Then the males are waiting for the females, pairing is immediate, home duties begin at once, and any tendency to wander is checked; e.g., how slow is the westward spread of the nightingale, and yet any locality whatever, made suitable within the already tenanted area by the planting of hitherto unwooded ground, is immediately occupied. This shows that it is an idiosyncrasy of the bird, and not any peculiarity of place, that localizes it. There is always, too, a certain homeloving tendency in animals, increased often in the case of bees by the gregarious instinct, or by an extremely patchy distribution of suitable sites for their tunnelling, which will tend to the formation of a colony. Some bees that are not narrow in their choice of positions are never colonists, some at times form colonies and sometimes not, while some are always found in colonies. The colonising habit does not seem to be always or ever entirely helpful to the species, though certainly the selection of a partner in bad weather or in an unfavourable season is made easier. The members seldom ally in common defence, though Halictus is said to combine against Chrysis; while the presence of a colony not only renders quick oviposition by parasites in the cells easy, but it attracts all the enemies and inquilines in the district: whether flies like Bombylius, Miltogramma or the Conopidae; other bees, parasitic like Melecta, Epeolus, Nomada, and Sphecodes; predaceous beetles, earwigs, Chilopoda, Acarina, Mutillae or ants, to say nothing of such inquilines as Volucella. The Strepsiptera, too, are apt to be very frequent in thick colonies.

This habit must then, far from assisting, actually often militate against the extension of a species. A. albicrus and argentala are extremely interesting forms, and represent a desert fauna. Their silvery pubescence, fitting a sandy environment, may be compared with that of Thereva annulata. Albicrus occurs on our sandy coasts and heaths, and also in open sandy woods. It requires an indurated, arenaceous soil, and a hard footpath may be chosen for its tunnels. It never occurs on heavy clay. Argentata inhabits the sandy wastes at

Poole Harbour and Studland. These two desert bees are the only Andrenae affected by Sphecodes except labialis attacked by S. rubicundus. The widely distributed, handsome nitida is common throughout Dorset, freely frequenting cultivated land. The single species of *Macrobis* is often not infrequent in marshy spots where Lysimachia vulgaris grows. Two of the three British species of Cilissa occur: haemorrhoidalis on Campanula and Malva, and leborina on Trifolium. Bees will sometimes visit different flowers in different localities. Dasyboda hirtibes is local. A colony with A. flavipes, in a sunny, sandy bank at Wood Street, near Wool, once strong, seems now extinct. may be experiencing some "latent years"; for there is a tendency in bees, as in some other insects, to go over the usual period of emergence, either to form part of a second brood or to appear a year, or years, belated. But it is unlikely that more than a few individuals in a season would lie dormant. not a whole colony! Panurgus (Panurgidae) ursinus is commoner than *calcaratus* but both are plentiful at Tadnoll.

Authophoridae: Of the genus Nomada almost invariably parasitic upon Andrena, but in one case, sexfasciata, on Eucera longicornis, and in another, fulva, on Halictus nitidiusculus, there are 15 of the 26 species found in Britain. Of Dorset species, which of course can only be found where their hosts occur, bifida is parasitic on albicans; lineola on bimaculata. tibialis and pilipes; fucata on flavipes (second brood); flavopicta on denticulata (probably); goodeniana (succincta) on nigroaenea, thoracica and perhaps nitida; lathburiana on cineraria; fabriciana on gwynana and nigroaenea; marshmella (alternata) on trimmerana and spinigera; leucophthalma (borealis) on clarkella and apicata; ruficornis on variaus, synadelpha, lapponica, fucata and helvola; solidaginis on fuscipes; baccata on argentata; hillana on wilkella; roberjeotiana on analis; and furva on H. nitidiusculus. The fine Nomadae, armata, parasitic on A. hattorfiana, and sexfasciata, parasitic on Eucera longicornis, are not recorded, though the former host is fairly common, locally, and the latter very common, locally. 1

Both the British species of *Epcolus*, parasitic on *Colletes*, are met with, *cruciger* (*rufipes*) being very common, far more so than *notatus* (*productus*). Both species of *Melecta* occur. They are parasitic on species of *Anthophora*, all four of which are present: *quadrimaculata*, found on Parley Heath being much the rarest. *Saropoda bimaculata* forms strong colonies on sandy banks both near the coast and inland.

Ceratinidae: neither of the British genera, Heriades nor Ceratina, seems to be recorded from Dorset. Chelostoma florisomue occurs at Glanvilles Wootton and in Yellowham Wood.

Megachilidae: Of the seven species of Coelioxys, four are They are parasitic on *Megachile*, of which we have the eight British species: C. vectis on maritima; rufescens on circumcincta, nesting in banks on heaths; elongata on ligniseca, in woods, etc., willughbiella which burrows in willows near heaths, and *circumcineta*; acuminata on centuncularis (?), a very common bee in gardens, burrowing in wood, more rarely in the ground or walls. We have two of the three British species of Stelis: aterrima at Blandford, Upper Bockhampton, and Yellowham: and bhoeobtera at Glanvilles Wootton and Dorchester. They are parasitic on Osmia ventralis. Osmia is represented in Dorset by nine of the eleven British species. It is less attached to sandy districts than many of the aculeate genera, and is more apt to occur on clay or chalk soils. Anthidium manicatum may often be found where Stachws sylvatica abounds. Eleven of the 16 British species of Bombus occur, widely spread: five and probably all six species of its parasites, of the genus Psithyrus, are commonly met with, especially in and about woods: B. lapidarius being parasitized by P. rupestris; B. terrestris by P. vestalis; B. hortorum by P. barbutellus; B. pratorum and jouellus by P. quadricolor; agrorum and venustus, perhaps, by campestris; and B. soroeusis, perhaps, by P. distinctus, which probably occurs, though unrecorded. Another enemy of Bombus, common in Dorset, is Mutilla europaea, of which many examples may sometimes be bred from a moderate number of the cells. Species of Conopidae are, also, real parasites. *Volucella* is only a scavenger in the nests of *Bombus* and *Vespa*. These parasitic enemies must affect the numbers, and thus indirectly the intensive distribution of the genus. Field-mice are said to destroy many of the exposed nests of the surface-building *Bombi*.

HYMENOPTERA TUBULIFERA (RUBY-TAILED WASPS).

The 23 British species are parasitic chiefly on Fossorial Hymenoptera and solitary bees and wasps, such as Osmia and Odvnerus: 13 are Dorset. Cleptes pallipes (semiaurata) occurs at Glanvilles Wootton parasitic on a sawfly. Notozus panzeri occurs on the Chesil Beach, and at Moreton, also frequenting heaths, and is perhaps parasitic on a *Pemphredou*. Elambus coeruleus occurs at Moreton and is said to be parasitic on Pseu. E. auratus occurs in Coombe Wood, and in the woods between Wool and East Lulworth, parasitic on small Sphegidae. Hedychridium minutum is found at Arne, Tadnoll, Lulworth, Portland, the Chesil Beach and Poole Harbour. H. roseum occurs at Arne and East Stoke preying on Tachytes pectinipes and Arbactus tunidus. Hedychrum nobile is met with in woods near Wool and East Lulworth. Chrysis cyanea occurs at Holme, Morden and Ringstead and other places. common, appearing to be parasitic on Hymenoptera nesting in bramble-stems, palings and decayed trunks. Chelostoma has been quoted among its hosts. C. succincta occurs at Lulworth, Parley Heath and Arne. C. vividula is common where Odynerus spinipes forms its colonies, and it is likely that C. neglecta, parasitic on the same wasp, occurs in Dorset too. C. fulgida has occured at Glanvilles Wootton and C. ruddii at Ringstead and Portland, but both seem rare. C. iguita appears to have many hosts besides O, parietum and other species of Odynerus and is very abundant and variable in size throughout the county.

HYMENOPTERA ENTOMOPHAGA (PARASITIC HYMENOPTERA).

Evaniidae: The two species of each of the two British genera, Evania and Gasteruption (Foenus) of this small family are Dorset. Evania minuta occurs at Lulworth and Parley

Heath and *E. fulvipes* at Piddletrenthide. *Gasteruption jaculator* is common in the county, *G. assectator* less so, but it occurs at Upper Bockhampton, Holme, and Glanvilles Wootton. *Evania* is parasitic on *Ectobius*, two of the British species of which genus occur on the seaside cliffs and inland sandy tracts. *Gasteruption* is parasitic on *Sphegidae* and can be caught flying over worm-eaten posts and tunnelled sandbanks while exploring for the nests of its hosts.

Pachylommatidae: The one British genus and species, Pachylomma buccata, a parasite of ants (Myrmica) has, only once, been taken in Dorset: at Lulworth, July 28th, 1838. It is found amongst sand-hills, on cliffs, and in other places frequented by the Myrmicidae.

Braconidae: This immense family has probably 1,000 British species, and each of its six large divisions is amply represented in the county. The first (Braconides) of the nine sub-families of the first division (Cyclostomi) contains the one genus Bracon, parasitic on Coleoptera. Hymenoptera, Lebidoptera and *Diptera*, possessing several common Dorset species, whose distribution will largely depend on that of their hosts, qualified by certain peculiarities of habit. The perfect insects haunt shady places, the sun, however, inducing them to feed or bask on flowers, especially *Umbelliferae*. The four genera of the Exothecides are poorly represented. The Rhyssalides is a Dorset group: the three genera are parasitic, sometimes externally, on Lepidoptera and Diptera, notably if leaf-miners. Colastes decorator seems common at Holme and elsewhere, and hariolator and braconius at Glanvilles Wootton. Spathiides have only one British (a Dorset) genus. Spathius exarator is common, particularly so at Upper Bockhampton. It attacks wood-boring beetles: Ptilinus, Hylesinus and, it is said, Anobium, a small host. Its distribution will be that of its hosts. S. rubidus is known from Glanvilles Wootton. one genus and species each of the Hecabolides and Pambolides are not yet recorded from the county, while the three general of the Doryctides seem to be only represented by Doryctes spathiiformis from East Chaldon, parasitic on Anobium striatum.

The Hormiides are shewn by only Hormius moniliatus from Glanvilles Wootton; the Rhogadides by a species of Clinocentrus and several species of Rhogas rather freely distributed through They are parasitic on *Lepidoptera*. The Cryptogastres are known in both their sub-families: Sigalphides and Chelonides: Sigalphus candatus is recorded from Glanvilles Wootton, and is said to have been bred from the coleopterous Orchestes quercus and the lepidopterous Tortrix luybericana. Curtis bred it from Oscinis vastator pupae in barley. Several species of Chelonus, especially the common inanitus, are distributed through the county, and at least one or two species of Ascogaster. A wide range of hosts must facilitate a wide distribution. Often each Braconid species attacks not merely several species of the same Order, but species of several different Orders, hence the same Braconid may occur in very various localities and situations. The Areolarii are present in many genera both of the Microgasterides and the Agathidides. No Mirax is represented. Accelius subfasciatus is plentiful where the *Tincidae* abound. The numerous Dorset species of Apanteles are almost always lepidopterous parasites, but Coleoptera, Diptera, and Neuroptera are not exempt from They in turn are preyed on by Cryptine and Ophionine genera of the Ichneumonidae and by Chalcididae. Apanteles limbatus is very common in gardens in Dorset where it largely parasitizes Abraxas grossulariata. A. spurius is also common, affecting M. aurinia and several other butterflies and Microplitis is represented by M. spinolae, taken at Ringstead, and *Microgaster* by several species, many common throughout the county according to their prey. The Agathidides, a more tropical sub-family, are poorly represented: Earinus gloriatorius occurs at Tadnoll and a few species of Microdus are met with, widely spread.

Polymorphi: The Euphorides are often, at least, coleopterous parasites. The two species of Streblocera are found at Glanvilles Wootton. Perilitus attacks adult Coccinella: cerealium, falciger, secalis, and aethiops occur: cerealium at Glanvilles Wootton and, possibly, not rarely throughout the

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county: the last three the writer has taken at Tadnoll, Burton, and Moreton. *P. falciger* has been bred from *Timarcha coriaria*, and should be met with where that beetle abounds on downs and heaths. *P. aethiops* favours heaths and sandy coasts.

The Meteorides, as chiefly parasites singly or gregariously of Lepidoptera, and less frequently of fungivorous Coleoptera, will have their range determined by these hosts. Many species of Meteorus are Dorset: M. ictericus and pulchricoruis being general, albiditarsis, ciuctellus, and rubeus also common, while obfuscatus and chrysophthalmus occur in the writer's garden and consors at Dewlish. M. fragilis and deceptor are reported from Glanvilles Wootton. Little is known of the distribution of the Calvotides in Dorset: Eubadizon extensor occurs parasitic on Depressaria nervosa and other Lepidoplera; Calyptus is presumably parasitic on Colcoptera. The Blacides are represented in both genera. Pygostolus sticticus, common in the county, is parasitic on Newatus and Macrophya, besides Lepidoptera, and P. falcatus is rare at Glanvilles Wootton. inhabits, often gregariously, damp, shady, willowy places affecting Coleoptera and Diptera. B. tuberculatus is common throughout the county, victimizing Otiorhyuchus and Baryuotus; and ruficoruis is also very common, hibernating in dead leaves and moss. B. pagauus occurs at Glanvilles Wootton and B. maculipes (?) at Upper Bockhampton.

The Liophronides are represented by Liophron lituratus, taken in Coombe Wood, and probably Centistes lucidator occurs. The group frequents fungi in woods, being, doubtless, parasitic on Mycetophilous larvæ. Ichneutes and Proterops, the first parasitic on Nematus and the latter on Hylotoma, represent the Ichneutides in Britain. The very rare P. nigripeunis has been found at Parley; but no Ichneutes is recorded. Neither genus of the Helcontides, coleopterous parasites, is Dorset. Both the genera of the Macrocentrides are Dorset. Macrocentrus are usually gregarious, Zelc solitary parasites, of Lepidoptera. M. abdominalis is very common throughout the county. It is recorded from Glanvilles Wootton; and the

writer has taken its cocoons, at Bloxworth, and bred it. *M. marginata* is likewise common, and he has taken it associated with *S. culiciformis* in birch stumps at Yellowham Wood. *M. thoracicus*, another common species, is reported from Glanvilles Wootton, and is found at Upper Bockhampton. *Zele testaceator* occurs at Glanvilles Wootton. The three genera of the *Diospilides* are represented in Dorset by *Diospilus oleraceus*, a common garden insect, parasitic on species of *Ceuthorrhynchus*, which form galls on *Sinapis* and *Brassica*. A doubtful *Diospilus* occurs in Coombe Wood.

The seven genera of the *Opiides* frequent damp, shady places, and are chiefly parasitic upon dipterous genera of various groups. Several species, such as the common *O. pygmaeator* of the large genus *Opius*, occur. The rare *O. nitidulator* and *O. pactus* are recorded from Glanvilles Wootton. *Biosteres carbonarius*, widely spread, represents a second Dorset genus.

Exodontes: Both the sub-families, Alysiides and Dachusides, are numerously present; but of the 18 genera of the former, several are rare. The *Alysiides* are usually dipterous parasites, largely affecting the Mycetophilidae, but also other families. Alloca contracta occurs at Glanvilles Wootton. Alysia manducator is very common throughout the county, parasitizing maggots, such as those of Lucilia, in carrion. A. rufideus occurs in Winfrith gardens, A. mandibulata at Glanvilles Wootton, and A. atra at Tadnoll, frequenting fungi in which it prevs on the larvæ of Mycetophilidae. Tanycarba rufinotata is recorded from Glanvilles Wootton. Phaenocarpa picinervis is common, as is P. ruficeps, taken at East Burton, and throughout the county. The last affects Anthomyia, Lonchaea and other *Dibtera*. The conditions necessary for the various hosts would determine the presence of the parasite more definitely were there not, often, so many alternative hosts. Adelura apii, parasitic on Acidia heraclei, a celery fly, is common. jaculans occurs at Tadnoll, where many varieties of Aspilota nervosa are found as elsewhere. It often attacks Homalomyia (Fannia) canicularis. Astilota distracta and one of its varieties. at least, are freely met with.

The ten genera of *Dacnusides* are dipterous parasites. Two of the three species of *Oenone* occur at Tadnoll where *Salix* grows in marshland. Many species of *Dacnusa* occur, *D. areolis* being common in suitable localities, everywhere, and the larger *stramineipes*, perhaps a variety of it, occurs at Tadnoll, where *ovalis* also occurs. *D. gracilis* is taken in Winfrith gardens. *Gyrocampa affinis* occurs in marshy places on *Lemna* and water plants. *Coelinius viduus* is reported from Glanvilles Wootton; *C. niger* is common on cultivated land preying upon *Chlorops* in corn; *procerus* is less common; *gracilis* seems well distributed, occurring at Tadnoll, and *C. elegans* is another common species. *Choenon anceps* occurs in marshy places.

Flexiliventres: Aphidiides: The distribution of the seven genera of this group may almost be said to vary directly as the supply of the aphides on which the species are parasitic and inversely as the abundance of their hyperparasites, chiefly of the cynipid genus Allotria. Monoctonus paludum occurs among marsh plants and has been taken at Winfrith. Trioxys heraclei has been taken at East Burton, and T. aceris, which seems widely distributed, at Winfrith. Many species of Aphidius are well spread over Dorset, especially rosae, avenac, and ervi. A. lonicerae, granarius and matricariae occur in the Winfrith and Tadnoll neighbourhoods.

There is no Dorset record of the remarkable Agriotypus armatus, the only British representative of the Agriotypidae: an aquatic hymenopteron which goes under water to deposit its eggs in larvæ of such Trichoptera as Goera, and Silo.

The enormous family of the *Ichneumonidae* is extremely well represented all over the county. Morley records 1,517 British species, and doubtless more are to be found. Probably more than half this number are Dorset. The multitude of this and some of the succeeding families makes detailed treatment impossible. This is the less to be regretted as the distribution of these parasites depends so largely on that of their hosts and the conditions necessary to the latter. To

account for these would be to trespass beyond the limits of The insects are difficult to discriminate, as, being parasites during one stage of their lives, and subject to the sway of an existence other than their own, an identity of conditions is often brought about. Or, if the same species affect hosts of different Orders, a great bionomic discrepancy These considerations, on the one hand, militate befalls against marked evolution in particular groups, and their species remain closely allied and hard to separate. the other hand, a species becomes so protean and unstable as to render its individuals hard to combine and recognize as forming one species only. But these factors act within certain bounds. Speaking generally, a large, or still more, a widely distributed small genus, must be ancient, but a small, if allied to a large genus, more recent than it. Other small genera will be of various ages. Although the hosts of certain forms are everywhere, yet the parasite may be restricted in range: Ichneumon primatorius, parasitic on ubiquitous Tribhacuae, is, in Dorset, nearly always found on marshy tracts: perhaps the stylopods of Augelica attract it hither, and the imaginal must be considered as well as the larval food. Probably four tribes of the first sub-family, the *Ichneumoninae*. contain only lepidopterous parasites, but the *Alomyides*, whose only species, Alomyia debellator, is common, have unknown parasitism. It is taken in such diverse localities as Tadnoll and Upper Bockhampton. There is no record of either genus of the small tribe Listrodromides, from Dorset. species of the tribe *Iophides* occur, of which *Protichucumon* laminatorius is one of the commonest, occurring wherever its host, Chaerocampa elbenor, is found. It is strange that neither species of Trogus is recorded, though their sphingid hosts are Coclichueumon fuscipes is common at Upper so numerous. Moreton and elsewhere; C. sinister and Bockhampton. lencocerus less so. All three sub-tribes of the Ichnenwouides Six of the genera of the Oxypvgini are in are present. good evidence, especially such widely dispersed species as Cratichnenmon fabricator, Melanichnenmon lencomelas, Ichnenmon sarcitorius, extensorius, confusorius and Chasmias motatorius.

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Among the nine genera of the Amblypygini, Ctenichneumon, Amblyteles, and Probolus are conspicuous by such common species as Ctenichneumon panzeri, Amblyteles palliatorius, armatorius, oratorius, castanopygus and Probolus alticola. the species of the five genera of the *Platvurini*, Eurylabus torvus, which occurs in woods where its host, Gnophria rubricollis, abounds, and E. tristis are amongst the most common. A large number of the 19 genera of the *Phaeogenides* are Dorset, occurring where their pabulum, almost always Pyralidina, Tortricina, or Tineina, but especially Psychina, is plentiful. *Phaeogenes stipator* is common at Dewlish. of the genera of the three tribes of the Cryptini have good exponents in the county: 41 with 317 species are described by Morley as British. They are parasitic on Lepidoptera, Hymenoptera, Coleoptera, Diptera, Neuroptera, Hemiptera, among the *Insecta* and also on *Arachuida*. The haunts of their hosts in these Orders will give some hint of their distribution in the Hyper-parasitism is frequent. The sub-tribe Phygadenonini of the Phygadenonides contains 16 genera of which Glyphicnemis is well represented by such species as G. profligator and G. vagabundus. The two groups of the sub-tribe Hemitelini, of which the Hemiteloides with its five, and the *Pezamachoides* with its two genera, are both vast, are very Hemiteles contains an enormous number varied in economy. of British and Dorset species, of which Hemiteles fulvipes is an abundant Dorset parasite, being hyper-parasitic on Apanteles and Microgaster. Another common Dorset insect is H. necator. probably, also hyper-parasitic. The species of Pezomachus are found in numbers inland on our marshes and heaths, and among woodland herbage, and on the shore. They are parasitic on spiders as well as on insects. The tribe Stilbuides of four genera is small. Atractodes gravidus and Exolvtus laevigatus are common Dorset types. The sub-tribe Mesostenini of the Cryptides with two genera is well represented in the county by Mesostenus obnoxius, common where its hosts of the genus Zygaena, occur. The sub-tribe Cryptini, with 14 genera, is numerously present, such species as Pycnocryptus peregrinator, many Crypti, and Acroricuus macrobatus being very common. Of the five tribes of the *Pimplinae*, of which there are 211 species in 39 genera in Britain, a large proportion are Dorset. Speaking generally it may be said that the Xoridides are commoner in the woodland districts of the county as many of them require lignivorous hosts, such as wood Coleoptera: Xylonomus pilicoruis at Upper Bockhampton and Glanvilles Wootton may be cited.* Many of the Pimblides, specially. occur in woods and marshes. Rhyssa persuasoria is common in fir-woods, where its host, Sirex, abounds, as at Upper Bockhampton and Morden. Species of Pimbla and Glybta are very numerous: Pimpla instigator is spread abundantly throughout the county, having a large number of lepidopterous hosts especially among the Arctiadae, Ocneriadae and their allies Several of the nine genera of the Lissonitides afford very common Dorset species, such as Lissouota bellator. variibes, sulphurifera, femorata and cylindrator, which is almost ubiquitous in both cultivated and other districts. The tribe Acaenitides is not so well represented as are the foregoing: Collyria puncticets is found at Moreton. Some species of both genera of the Banchides are common: Banchus volutatorius is widely spread, and is common on Rempstone and other heaths near Poole Harbour; B. pictus occurs at Wood Street. Exetastes guttatorius is taken in the Winfrith neighbourhood. Of the five tribes of the Tryphoninae, the one genius of Metopiides, Metopius, preving on large Lepidoptera, such as Bombyx and Lasiocampa, has been noted: M. dentatus having been taken at Parley Heath and in one or two other places, and micratorius on West Knighton Heath. The one genus and species of the Sphinctides, parasitic on Apoda limacodes, is unknown in Dorset, as is perhaps its host. The two subtribes of the Exochides are well represented and are chiefly parasitic on *Tortricidae*. Of the seven genera of the *Exochini*, Chorinaeus is in good evidence over the Winfrith neighbourhood, Polyclistus mansuetor is very common about out-buildings,

^{*} The removal of old, ivy-covered, decayed and perforated trees, and the coppicing of woods, is very detrimental to many insects besides woodborers and their parasites.

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probably preving on Pyralis farinalis, and Exochus has many exponents of which E. erythronotus from Upper Bockhampton may be instanced. Of the Orthocentrini many species of Orthocentrus and Steuomacrus occur at Winfrith, and doubtless all over the county where the necessary, usually Tortricid or other small lepidopterous, pabulum is found. Of the Bassides, Bassus and Howocidus are common genera. Their distribution will follow that of the *Syrphidae*, on which they prev. four sub-tribes of the Tryphonides usually prey on Teuthredinidae, and probably some species on *Fossores*. They may be found throughout the county in meadow, wood, marsh, and by riverside, wherever their prey finds suitable haunts. Amongst the large sub-tribe Tryphonini, Sphecophaga vesparum prevs on wasps' larvae, and is found at Bockhampton. Dyspetes pragragator is common in marshes, probably parasitic on marsh Doleri. It is found at Tadnoll and Iford. Tryphon rutilator, trochanteratus, and signator occur throughout the county. Of the Cteuiscini. Diaborus lituratorius occurs at Glanvilles Wootton and the writer has seen it in his garden, ovipositing in the larvae of Nematus ribesii. Of the many Mesoleptini, Mesoleptus typhae is well spread, and Perispudus sulphuratus occurs too in the marshes of the county. Several Ctenopelmini occur: among them Scolobates auriculatus is found at Yellowham Wood, preving on Hylotoma. The Plectiscides, the first of the nine tribes of Ophioninae, prey on nematocerous Diptera. Of the several Dorset genera and species, Megastylus conformis and Helictes mediator have both occurred in Winfrith gardens. three genera of the Porizonides, Diaporus and Thersilochus occur in such marshy districts as Tadnoll. probably preying on Mycetophilidae. Of the genus Cremastus of the Cremastides, geminus occurs where its host Psyche villosella abounds: decoratus with Retinia buoliana, at Corfe. and interruptor with Scythris variella in Purbeck. 25 genera of the Campoblegides are Dorset: certain species of Campoplex, Sagaritis, Limnerium, Omorga and Olesicampa being ubiquitous. The one genus and species of the Pristomerides. Pristomerus vulnerator, is common at Glanvilles

Wootton and probably wherever in Dorset its varied lepidopterous hosts occur. It is said to be often an orchard insect. preving on Carpocapsa pomonella, and therefore highly benefi-The nine genera of the Anomalides are all parasitic on Lepidoptera. Erigorgus carinatus occurs at Tadnoll: Anomalon xauthopus, widely spread, at Wood Street, West Knighton, and other woods; Labrorychus nigricornis in various districts, as Coombe Wood and the coast at Ringstead; L. claudestinus at Bockhampton, etc.; and L. tennicornis in such localities as Bloxworth and Remostone Heath. Anomalou flaviolatum, a very useful parasite, occurs in all the oak woods of the county. parasitizing Hybernia, Cheimatobia and other lepidopterous larvae; A. anxium is found in Coombe Wood. The Ophionides are lepidopterous parasites. Ophion luteus is distributed through the county, like its many hosts, as are stigmaticus and distans: caicaratus is common at Winfrith and minutus at East Burton. Henicospilus ramidulus, a somewhat maritime species, occurs The *Paniscides* are well known by many species of Paniscus: tarsatus occurs at Winfrith: virgatus and latungula in the Wood Street woods; cristatus throughout the county; gracilipes at Winfrith and Wood Street, and fuscicornis and testaceus at Winfrith. The three genera of the Mesochorides are Dorset. The species seem to be almost if not entirely Astiphronums strenums occurs at Coombe. hyperparasitic. Many Mesochori abound, as confusus, which the writer has bred, hyperparasitically, from Winfrith Abraxas grossulariata, through Apanteles limbatus; pallidus bred from Winfrith Porthesia auriflua probably through Rhogas; crassimanus found in Merley Wood; brevipetiolatus found at Tadnoll, Bockhampton, and widely distributed, and facialis found in the Winfrith Stictopistlus laticets has been bred from neighbourhood. Weymouth A. grossulariata through Apauteles.

There is only space to consider the distribution of the extremely beautiful, minute, but enormous family of the *Chalcididae* in the most general way: indicating by inference those peculiarities of economy which will determine their occurrence or absence in particular localities. The British species, disposed in five sub-families, must amount to 1,000,

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and are abundant, in many genera, in appropriate environment throughout the county. Some are parasites in eggs, larvae, or pupae, some hyperparasites, some, apparently, are both; some form galls, and many attack other gall-makers. Lepidoptera are largely victimized: so are Diptera, Coleoptera, other Hymenoptera, Hemiptera (Aphidae and, largely, Coccidae) and other Orders. There are five genera of Chalcides, of which the genus Smicra is remarkable as attacking water insects, being parasitic on the aquatic larvae of Strationivs. It is found at Glanvilles Wootton and other places where this pabulum is present. Eurytoma abrotani may be taken as typical of the 11 genera of the Eurytomides. It is common throughout Dorset. sometimes parasitic in galls and sometimes hyperparasitic through Braconidae on various larvae, so that, supposing no error of observation to have occurred, its capacity for distribution should be considerable. Of the Pteromalides there are some 52 genera. Torymus auratus is a widely spread species wherever the oak-apple gall is found: its long ovipositor allowing it to parasitize the larvae of the gall-maker, Biorliza terminalis, inside. Pteromalus puparum is another common Dorset species: laying its eggs in the chrysalides of several well-known Lepidoptera. Many species of the 17 genera of the Encyrtides, as Encyrtus and Coccophagus are parasitic on Coccidae, and are found in such neighbourhoods as are propitious to their hosts. Elasmus flabellatus, occurring at West Knighton Heath and Parley, parasitizing, or perhaps hyperparasitizing, Psyche villosella, typifies the 13 genera of the Eulophides that, like the preceding sub-families, show very varied bionomics to affect their occurrence in the county.

Proctotrypidae or Egg Wasps. The species of this family are largely parasitic in the eggs of insects and spiders. Many of the 12 genera of Diapriides are found in the county. They, with the Proctotrypides, Ceraphrontides, Platygasterides, and Myrmarides often frequent obscure and humid localities and water plants, while the Gonatopides are often found in hot, sandy places: Platymischus dilatatus is found at Charmouth and Lulworth, on rocks by the sea. Diapria seems to

parasitize the larvae of the *Tipulidae*: such genera as *Belvta* and Cinetus those of the Mycetophilidae found in fungi in autumn. The genus Proctotrybes, of the Proctotrybidae, also often frequents fungi, several of its species also affecting mycetophilous larvae. Certain of the nine genera of the Gonalopides, such as Bellylus, approximate in appearance, as well as habit and habitat, to those described under the fossorial Aculeata. The writer has found Bethylus fuscicornis burrowing into the dead stem of Dipsacus at Ringstead, and has also found it at Bockhampton and Coombe Wood. Megaspilus, one of the four genera of the *Ceraphrontides*, is largely parasitic on aphides. Of the Dorset members of the 13 genera of the Platygasterides, Thoron may be found on water plants; Telenomus belinus I have found at Wood Street, emerging from a cluster of eggs of Pentatoma prasina on a leaf. Teleas often oviposits in the eggs of Bombyx neustria and other Lepidoptera, sometimes in those of *Heteroptera*, and species have been reared from galls. Platygaster is important as an enemy of certain Cecidouvidae, such as Cecidomyia destructor, so destructive to cereals. The Myrmarides consist of eight genera of very minute insects parasitic in the eggs of other insects and spiders. often be found on windows. I have taken Ooctonus vulgatus at Winfrith. Myrmar pulchellus is recorded from Glanvilles Wootton. Certain genera, such as Polynema and Anagrus, are aquatic, swimming with their fringed wings or legs under water, the former laying its eggs in those of the dragonfly, Calopleryx virgo. Anagrus incarnatus found at Glanvilles Wootton and, probably, throughout the county, if its hosts occur, is also parasitic in the eggs of the Odonata.*

Of the five sub-families of the *Cynipidae* or Gall-flies, all save the *Ibalina* with its one species, *Ibalia cultellator*, are numerously present in Dorset. Why *Ibalia* should be so rare or absent,

^{*} Dale records 26 Proctotrypidae and 109 Chalcididae from Glanvilles Wootton, estimating (far too low) the British species at 375 and 1,344 respectively. Morley's "List of British Chalcididae" (1910) gives 148 genera and 1,424 species. My estimate should read 2,000.

its prev often being so common, it is difficult to say. three tribes of the Figitina, the Onychides with its one British genus and species, bred from a Caltha-feeding beetle, and perhaps also preying on Dibtera, is absent from the county. I have taken three (Figites, Amblynotus, and Melanips) of the seven genera of the Figitides in the Winfrith district and species of Figites seem distributed through the county, and present wherever such dipterous genera as Sarcobhaga. Hydrotaea, Anthomyia and Phorbia find suitable breeding haunts: their maggots affording the necessary pabulum. Both the genera of the Anacharides occur in Dorset. Aegilits occurs in the Winfrith neighbourhood, and the writer has bred Ae. bicolorata from Moreton oak-apples. Anacharis has occurred at Glanvilles Wootton, but will be distributed, no doubt, wherever the larvæ of the *Hemerobiidae*, which it parasitizes, abound. The six genera of the Eucoelina parasitize Diptera and occasionally Coleoptera; Syrphidae, Tachinidae, Muscidae, Agromyzidae, Phoridae, and doubtless other dipterous families. Their distribution will be an index to that of their suffer. Species of Eucoela and Kleditoma are numerous in the county. Eucoela rufula occurs at Glanvilles Wootton and many Kleditoma in the Winfrith neighbourhood: the two species with abbreviated wings, K. subaptera and K. halophila, occur on the coast among sea-weed covered rocks, probably preving on the larvae of the *Borboridae*, there so common. Of the two genera of the Allotrina, Allotria has many common Dorset species, which are frequent wherever aphides and their parasites, e.g. Aphidius, are met with. They parasitize both hosts and parasites. Allotria victrix swarms in Dorset gardens preying on Siphonophora rosae. The species of the 14 genera of the Cynipina either make galls or are inquilines in galls, being only parasitic in one or two rare cases, e.g. Diastrophus aphidivorus, which is parasitic on the nettle aphis. Far the greater number of their galls are formed on oaks, some on Rosa (Rhodites) and a few on Rubus (Diastrophus). forms galls on Hieracium, Hypochoeris, Centaurea, Nebeta. Papaver, and Triticum; and Xestophanes, which, however, is not Dorset, on Potentilla. The presence of these plants largely

determines their occurrence, and subject to this factor it is very universal. Such parts of the county as have their oakwoods and hedges least cut and trimmed will be those where the genera of Cynibina will most flourish. Their distribution is at times very strange; one part of the same wood may contain large numbers of galls of many species, other parts Periclistus is inquiline in galls of Rhodites: none at all. Sabholytus in galls of Andricus radicis and Neuroterus punctatus and Ceroptres in galls of A. radicis, but Sapholytus and Ceroptres have no county record as yet. Several of the 13 species of Synergus are commonly distributed: Synergus Reinhardi being very common in the galls of Cynibs Kollari at Coombe Wood and throughout Dorset. Diastrophus rubi is a common species as are many of the 20 species of Andricus. The oak-gall of Cynibs Kollari may be found everywhere in young or scrub oak, usually very low down. Trigonaspis megaptera is recorded from Glanvilles Wootton. Biorliza terminalis, the well known oak-apple maker, is met with through the county. Dryobhanta folii, longiventris and divisa are common, and agama is recorded from Glanvilles Wootton. Four of the seven species of Neuroterus, including the two common "spangle galls," are frequent: N. abrilinus occur at Warmwell, more commonly on oak stubs of a few years growth. Thus eleven genera of Cynipina are Dorset, and a very large proportion of the British species are well distributed through the county, many being Any absence of parasites, which extremely common. enormously affect the Cynipina, will have a very favourable effect on their numbers. Inquilines appear to do, usually, but little harm.

HYMENOPTERA PHYTOPHAGA (SAW-FLIES).

The three families Lydidae, Siricidae, and Tenthredinidae, are represented. Neurotoma and Pamphilius of the three genera of the Lydini occur. Neurotoma flaviventris is found at Cranborne Chase. Pamphilius gyllenhali, balteatus, hortorum, depressus, pallipes, inanitus, and sylvaticus occur in the woods of the Winfrith neighbourhood and, I suspect, all those in the county presenting the same fundamental features: mainly the

necessary food plant. P. hortorum is the commonest but inanitus and sylvaticus may be more widely spread, the former often feeding on rose in gardens, the latter on Pyrus, Prunus, Populus and Satix; pallipes requires birch. Of the Cephini, pith-feeders, four of the five genera have occurred in Dorset. Macrocephus linearis is well distributed and M. satvrus occurs at Glanvilles Wootton. Cethus tallites and tyomaeus are found throughout the county: pygmaeus is very common in cornfields, the larvæ feeding in the stubble, and the perfect insect frequents Umbelliferae and Ranunculus, of which it is very fond. Its parasite, Collyria calcitrator, largely keeps its ravages in check. *Janus cynosbati*, feeding in the lower branches of oak, occurs at Glanvilles Wootton. Calamenta is not Dorset. Trachelus tabidus is found at Swanage. The birch-frequenting Xvela julii of the Xvelini has occurred at West Knighton Heath.

Siricidae: of the two species of Xiphydria of the Xiphidriini, neither the willow-feeding prolongala, nor the alder-feeding camelus is recorded from Dorset. Of the Siricini, with its one genus Sirex, both S. gigas and noctilio are found, the first being common in all the large fir-woods, and the second occurring at Parley, Bloxworth, and Glanvilles Wootton. Many specimens of S. gigas emerged at East Knighton, from firpoles brought from East Lulworth to be used for building. All were males. Species of this genus, feeding in solid wood, can be distributed widely and introduced into new localities in this way. Oryssus of the Oryssini is not Dorset.

Tenthredinidae: The genera Cimbex, Trichiosoma, and Abia of the Cimbicini are all Dorset. Of the three British species of Cimbex the birch-feeding femorata is alone known as belonging to the county. It occurs in all the larger birch woods and copses from Wimborne and East Lulworth to West Knighton, and presumably in other birch woods. Of the four British species of Trichiosoma, tibialis feeding on hawthorn occurs at Winfrith, and lucorum is very commun at West Knighton, East Lulworth and Yellowham Wood, being also reported from Charmouth, Dorchester, Glanvilles Wootton and Blandford.

In 1918 it appeared in such abundance over birch as to give the impression of an immigrant swarm. Of the four British species of Abia, sericea is very common and fasciata rather less so, throughout the county. A. candens is known from Winfrith Heath, Holme, and Yellowham Wood. Both the genera of the Argini are Dorset. Arge cyanocrocea is abundant on Umbelliferae: ustulata is also common and well distributed: fuscipes harbours in fir trees at Morden and is said to feed on Salix: pagana occurs at Dorchester; coeruleipennis, atrata, ciliaris, and enodes at Glanvilles Wootton. Schizoceros geminatus has been reported from the same place. Of the two genera Lophyrus and Monoctenus of the Lophyrini, the first occurs in Dorset in one or two species; Lophyrus pini being found at Morden. It is often very destructive to *Pinus*, where abundant. but the genus is chiefly a more northerly one. sertifer has been recorded from Glanvilles Wootton. tribes of the Tenthredinini are all well represented in the Of the Nematides every genus, save, perhaps, Micronematus, with its one species, is found in Dorset, and in proportion to their number of British species are usually well represented and distributed, though several of the species are more northern. Cladius pectinicornis is found at Glanvilles Wootton, several species of Trichiocambus and Priophorus in the Winfrith neighbourhood, and generally dispersed, as are species of Cryptocampus, which are gall-makers and also Pontania, Pteronus, Amauronematus, Croesus, Holcocneme, Nematus, Pachynematus and Pristiphora. Many are garden insects like Pteronus ribesii, common every-where. four genera of the Hoplocampides, Eriocampoides and Hoplocamba are represented by several species at Winfrith and elsewhere in Dorset, one or two species of Eriocampoides being very destructive to fruit trees; Phyllotoma microcephala is recorded from Glanvilles Wootton, but Hebtamelus ochrolencus, a northern insect, is unknown so far south. Several of the 15 genera of the Blennocambides are common. Mesoneura verna occurs at Wood Street, but of Phymatoceros and Rhadinoceraea, each with a single species, the writer knows no record. Pareophora nigripes occurs at Holme. Neither species of Periclista is

recorded but melanocephala is probably present. The two species of Ardis are absent. Of the six species of Tomostethus four are present: fuliginosus at Tincleton and Glanvilles Wootton; dubius near Dorchester, Holme, Moreton and Glanvilles Wootton: Interventris in marshy places at Moreton and Tadnoll, and gagathinus at Owermoigne. Of the six species of Blennocamba, four are Dorset: assimilis found at Glanvilles Wcotton and Owermoigne; tenuicornis at Moreton. Tadnoll, Iford, and other localities, specially of a marshy kind: alternipes at Ringstead and Glanvilles Wootton and pusilla at Glanvilles Wootton. Of the three species of Scolioneura, betuleti occurs at Wood Street. The single species of Entodecta seems absent, but all three species of Monophadnus are present: albipes at East Lulworth and Bloxworth; geniculatus at Iford, Holme and Oakers Wood: ruficruris at Moreton, where also is found Pseudodineura fuscula, a leaf-miner of Ranunculus. Curiously, no species of Kaliosysphinga, Fennsa nor Fenella, also leaf-miners, is recorded; being small, they are probably overlooked. Of the Selandriades, all the genera are present in the county. Harpiphorus lepidus occurs at Glanvilles Wootton. Athalia spinarum, once so destructive to turnips, but now rare, occurs at Iford; lineolata occurs everywhere; lugens at Moreton, Warmwell and Winfrith, and glabricollis everywhere, being found at Winfrith, Holme, East Lulworth, Moreton and Ringstead. The larvae of the genus seem very polyphagous. Selandria serva is very common, Holme, Ringstead and Moreton are some of its localities: sixii is found at Moreton. Tadnoll, Wood Street, etc.; stramineipes is everywhere; morio is found at Yellowham, Iford, Moreton and Wood Street, to quote but a few places, and analis at Glanvilles Wootton. Of the three species of Strongylogaster only the very common, bracken-frequenting cingulatus is Dorset, and none of the four species of Thrinax. The one species of Stromboceros, the fernfeeding delicatulus, occurs at Moreton and Bockhampton, and probably throughout Dorset. There seems to be no record of the common and almost entirely parthenogenetic Eriocampa ovata from the county. Poecilosoma abdominalis occurs at Glanvilles Wootton as does pulverata excisa at East Lulworth,

West Knighton, Iford and Morden; klugi at Upper Bockhampton; liturala is found throughout the county; immersa at Tadnoll; longicornis at Iford, and a species which may be either tridens or hungarica, at Morden. Emphytus togatus occurs commonly at Winfrith, Yellowham and more widely: cingulatus at Glanvilles Wootton; cinctus is found at Moreton and Wood Street, being very common; rufocinctus at Glanvilles Wootton; calceatus at Glanvilles Wootton, Moreton Tadnoll, being frequent: braccatus at Moreton and Glanvilles Wootton; serotinus and var. filiformis at Glanvilles Wootton as also perla: tener is very common at Burton and beyond, and grossulariae occurs in Winfrith and other gardens. the four species of Taxonus are Dorset: glabratus is abundant, and occurs at Glanvilles Wootton, East Lulworth and Burton; agrorum at Glanvilles Wootton and the common equiseti at Glanvilles Wootton and Tadnoll. Of the Dolerides, both Of the three species of Loderus, only genera are present. vestigialis, common throughout the county in suitable places, has been met with. Of the 27 species of Dolerus, 15, and probably more, are Dorset: madidus, aericets, gonager, puncticollis, niger, picipes. a species which may be oblongus. aeneus and sanguinicollis (var. fumosus) are well distributed in congenial habitats; pratensis occurs at Winfrith and Glanvilles Wootton among Equisetum; palustris at Tadnoll; haematodes at Iford; nitens at Glanvilles Wootton; nigratus at Wool and Glanvilles Wootton and rugosulus at Moreton. Our Tenthredines are very numerous, all genera being represented. Sciopteryx costalis, a rare species, occurs at Bockhampton and Ringstead. Of Rhogogaster, fulvipes, punctulator, viridis and aucupariae are well distributed through the county, the fifth species (picta) occurs at Glanvilles Wootton, and no doubt elsewhere. Perineura rubi occurs, uncommonly, at Glanvilles Wootton. Three of the four species of *Pachybrotasis* are found: rapae is widely distributed, the writer has taken one specimen of the exceedingly rare simulans at Wood Street, while antennata is local but common at Glanvilles Wootton. Counting haematopus, a doubtful British species, which has been recorded from Glanvilles Wootton, perhaps mistaken for a variety of rufipes,

nine of the ten species of Macrophya are Dorset: M. rufites, annulata: 12-bunctata, in such places as osier beds, as at Iford and West Knighton; rustica on Umbelliferæ, and albicincta are widely distributed and common. Punctum album is common on ash at Wood Street and is found at Glanvilles Wootton where *blanda* is abundant. M. ribis occurs at Winfrith, Moreton and Ringstead. Of the ten species of Allantus, Dorset possesses at least five, of which scrophulariae, archatus (with its var. nitidior) and vesta are widely spread and common. Marginellus occurs at Moreton and Iford, and distinguendus, considered rare, at Moreton, Wood Street and East Lulworth. Eight of the 13 species of Tenthredo are Dorset: temula, mesomela, atra and livida being very common over the county. Olivacea, commoner, perhaps, in the north of England than in the south, occurs at Oakers Wood; moniliata at Iford and West Knighton being rather rare, while ferruginea is tolerably common through the county, and balteata, taken at Coombe Wood and Holme, still more so. If we assume the number of species of Tenthredopsis to be 15 we may consider about eleven are natives of Dorset, but the genus is so difficult and puzzling that all estimates are, at present, doubtful. T. litterata is well distributed over Dorset in at least five of its varieties; coquebertii is also very common; excisa occurs at Bockhampton, as does nassata, found too, at Wood Street; dorsalis and dorsovittata occur at Burton, also feuestrata which occurs at Coombe Wood and Bockhampton as well. Palmata is found at Owermoigne and abundantly at Glanvilles Wootton; gibberosa occurs at Wood Street; a species, which may be inornata, at Clyffe and Upper Bockhampton, and a species which may be tiliae and tiliae (var. inornata) at Moreton and Wood Street.

The larvae of saw-flies being phytophagous, their occurrence will be much influenced by the local flora. The Salicaceae (Salix and Populus) supply food to the largest number in the larval state (between 60 and 70) chiefly Nematina: a group with rather a northern distribution. The Rosaceae (particularly Prunus, Crataegus, Pyrus, Rubus and Rosa) support some 50

species; the Betnlacae (Betnla and Alnus) between 30 and 40; the Coniferae (chiefly Pinns) over 30; the Cupuliferae under 20; the Caprifoliaceae, the Rannuculaceae, and Cruciferae, perhaps, each under a dozen. One of our very commonest saw-flies, Tenthredo mesomela, feeds on Heracleum, Polygonum, and other common plant genera. To such an extent as a species is polyphagous its distribution should be helped. Many imagines frequent flowers, and, though several are carnivorous and do so partly to prey upon other insects found on them, an abundance of suitable flowers such as Umbelliferae will certainly be a factor in the distribution not limited in its influence to the larval state.

In conclusion it may be pointed out that though large mining, manufacturing and industrial works, which so militate against a fauna and flora, have, happily for naturalists, ever been absent from Dorset, yet the county is not free from some menace to its faunal and floral wealth. This is especially so in its south-eastern part. Though no noxious fumes poison the air, nor chemical effluents pollute the streams, nor soot besmirch the soil and vegetation for miles around, yet the sheer pressure of population, and the building which is its accompaniment, are already contracting the areas of distribution of many interesting forms, even threatening them with extinction. A senseless spirit of destruction, a tendency to prefer foreign to British forms of plant and animal life, or to domesticate the latter, need combating. So the perpetual newspaper cry for more, and yet more population, suggests a thoughtful rejoinder. Over-population spells unemployment, unrest, physical and moral degeneracy, and war. character in its members, not mere vastness of numbers, should be the aim of a wise government bent on creating an ideal State. A self-controlled, self-respecting, if less prolific people, conscious of high ideals, is of more value than degraded millions. Village life, if Literature, Art and Music cannot be placed within its reach, should be all the more, consciously or subconsciously, stimulated to intellectual and spiritual advance by being able to mix with a Nature not beggared and outraged for entirely utilitarian ends, but still shewing its holier, more

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elemental meaning. Country life will never be truly brightened till it is led to feel the interest and loveliness of the world at its feet and around it. The advent of amusements that too often play down to lower tastes, fostered by a depraved and vulgarized press, will not end in salvation! To obliterate our last acre of so-called 'waste' land, and our last remnants of native animals and plants, may feed a few more human beings. but only by a sacrifice of those sources of recreation which yield to life much of its value, and render it capable of achieving its diviner purpose. Man does not live by bread The untouched territories of wood, heath, down, marsh and cliff, are in truth, no 'waste' lands. They are the hermitages and sanctuaries of Earth: as necessary to our life. more necessary to our spirit, than all the acres that afford us corn and meat: standing high amongst those beneficent influences by which Man attains to a tranquillized and nobler humanity.

I must specially mention, among other books consulted, the classic monographs of Mr. Claude Morley, the Rev. T. A. Marshall and Peter Cameron. Also very particularly "British Ants" by Mr. H. St. John Donisthorpe. The writings of the Rev. F. D. Morice, Dr. R. C. L. Perkins and Mr. Geo. B. Walsh have been of the utmost value.





Phenological Report on first Appearances of Birds, Insects, &c., and first flowering of Plants

IN DORSET DURING 1921.

With Other Hotes on Local Hatural History.

By the Rev. F. L. BLATHWAYT, M.A., M.B.O.U.

Notes have been received from :-

- (W.J.A.) W. J. Ashford, Blandford.
- (F.L.B.) The Rev. F. L. Blathwayt, Melbury Osmond.
- (W.P.C.) W. Parkinson Curtis, Drake North, Parkstone.
- (G.D.D.) Dr. G. Dru Drury, Corfe Castle.
- (F.H.H.) Dr. F. H. Haines, Winfrith.
- (F.G.P.) Dr. F. G. Penrose, East Cliff, Bournemouth.
- (N.M.R.) Nelson M. Richardson, Monte Video, Weymouth.
- (J.R.) The Rev. J. Ridley, Pulham Rectory.
- (L.R.) Leigh Robinson, Netherbury.
- (E.S.R.) E. S. Rodd, Chardstock House, Chard.
- (J.H.S.) Dr. J. H. Salter, Verwood.
- (E.E.W.) Miss Ellen E. Woodhouse, Chilmore, Ansty.

NOTES ON MAMMALS.

Harvest Mouse. Observed on the Chesil Beach on June 21st, and at Melbury Osmund, Aug. 11th. (F.L.B.)

NOTES ON BIRDS.

Dartford Warbler. A pair had young out of the nest on May 7th, so that incubation must have begun about the 10th of April. This is a hardy little bird, and I do not think it suffered much from the frost of Jan.-Feb., 1917. What is most against its increase is the burning of the gorse-covers, never so general as this past summer, when fires swept over the heaths for miles. (J.H.S.). Five nestlings out of nest on July 1st, reported to F.L.B., who also saw many examples of this species on May 9th and on same date a nest with four eggs, another with nestlings ready to leave, and a third from which the young had flown a few days previously. (F.L.B.)

Lesser Whitethroat. Nest and eggs, Oxbridge, near Beaminster, June 5th. (L.R.)

Redstart. August 16th, on migration, Verwood. (J.H.S.) Nest with six eggs Melbury Park, May 31st. (F.L.B.)

Cirl Bunting. Feeding young near Wimborne, June 8th. (J.H.S.). Feeding young, Abbotsbury, July 18th. (W.J.A.). Nest and three eggs, Upwey, August 3rd. (F.L.B.)

Hawfinch. April 25th, Pulham. (J.R.). Frequently seen near Cranborne. (J.H.S.). Regularly visits the yews in Melbury Osmund Rectory garden for berries. (F.L.B.)

Siskin. Twelve on Alders, Ryme, December 17th. (F.L.B.)

Lesser Redpoll. Breeding Morden Heath, May 26th. (F.L.B.)

Woodlark. Leaves these heaths for the winter returning in February (pair seen February 19th). Young of the first brood on the wing May 8th. Singing, September 20th and 23rd. (J.H.S.). Singing, January 3rd; feeding young, April 12th; two nests and four eggs each, April 30th and May 10th; singing, Abbotsbury, June 14th; singing through autumn and winter up to December 10th, N.W. Dorset. (F.L.B.)

- Dipper. Several pairs, nest found April 20th, Netherbury, (L.R.)
- Red-backed Shrike. Nesting in June at Bucknowle and near Chapman's Pool. (G.D.D.)
- Great Spotted Woodpecker. Monte Video, July 1st. (N.M.R.)
- Wryneck. Not many about this season, Netherbury. Heard April 28th (L.R.). Young of first brood at Verwood, left nest in detachments, June 19th—23rd. On July 30th I found the last young of a second brood dead in the nest. (J.H.S.) This species is usually single brooded, and the above record is very interesting. (F.L.B.)
- Montagu's Harrier. Seen on heath, East Dorset, December 20th. (J.H.S.). Harriers noticed near Weymouth, October 2nd and 15th. (N.M.R.)
- Little Owl. Melbury Osmund, January 14th; and in district, September 21st. Many seen by shooting parties at Abbotsbury during winter. (F.L.B.). Netherbury, September 21st; new to that district. (L.R.). Increasing Verwood district. (J.H.S.)
- Gadwall. One shot, Sherborne, January 14th; four pairs there, February 8th. (F.L.B.)
- Pintail. About four pairs, Sherborne, February 8th. (F.L.B.)
- Teal. Nest and nine eggs, Studland, May. (F.L.B.)
- Pochard. One drake, Morden lake, May 26th. (F.L.B.)
- Common Scoter. Flock in West Bay, April 13th. (F.L.B.)
- Smew. A female, Sherborne Lake, February 8th. (F.L.B.)
- Great Crested Grebe. Two on sea in West Bay, February 22nd. (F.L.B.)

- Red-throated Diver. A pair on sea in West Bay, April 13th. (F.L.B.)
- Turtle Dove. Several at Portland Bill Light, about October 15th, reported by light-keeper to F.L.B.
- Turnstone. One, Swanage, September 10th. (F.G.P.)

- Common Sandpiper. One on the Stour, July 5th, (? breeding). (J.H.S.)
- Wood Sandpiper. One on the brook below Verwood Station, June 6th. (J.H.S.)
- Common Redshank. Breeding, Abbotsbury; young seen with parents June 21st. (F.L.B.). An old keeper remarked to J.H.S. that this bird as a breeding species had greatly increased in those parts the last 30 years. Two nests and eggs, Studland, May. (F.L.B.)
- Avocet. A pair seen and one shot on the Fleet Waters near Weymouth in the autumn (August?) and reported to Major W. R. Thompson, of Weymouth.
- Black Tern. Joe Gill saw one at Abbotsbury Swannery on June 24th, and the fishermen had seen some at sea there in the spring. (F.L.B.)
- Sandwich Tern. One seen Chesil, June 13th, pair there, noisy, June 30th, no proof of breeding. (F.L.B.). Two seen near Studland, September 11th. (W.J.A.)
- Roseate Tern. About three pairs attempted to breed on the Dorset Coast. F.L.B. and F.G.P. found a nest with two eggs (birds marked on to nest) on June 13th. These were destroyed by gulls or rats on June 21st. W.J.A. marked a bird on to one egg on June 27th, but this was unfortunetely destroyed in the same way on June 29th. F.L.B. marked a bird on to one egg on June 30th. This possibly hatched off safely, as on July 26th Roseate Terns were seen by

F.L.B. with fish in their bills, apparently feeding young. F.L.B. and W.J.A. still saw some about on August 3rd. This is an exceedingly interesting record, as the species has never previously been recorded as breeding on the South Coast of England, and there are very few breeding stations in the British Isles.

Common Tern. Arrived in force at breeding station on April 20th; and many eggs, some full clutches, by May 14th. The birds after a good breeding season left from August 8th—10th. (F.L.B.)

Great Skua. A specimen was caught, while feeding on a Coot, by a dog near Abbotsbury, on December 22nd. Unfortunately it was not preserved. See *British Birds*, Vol. XV, p. 242. (F.L.B.)

Little Auk. One picked up exhausted near Corfe Castle, November 11th, and brought to G.D.D.

Black Grouse. Our old residents whose memory goes back 30 years or more remember the Black game. It appears that the last individuals vanished from these heaths from 20 to 25 years ago, and from the New Forest rather more recently (1911) (J.H.S.) A female was reported to F.L.B. as seen on Batcombe Hill, about a week after the very severe blizzard and snowstorm of March 31st—April 1st, 1922.

Red-legged Partridge. A pair on Batcombe Hill, April 29th. (F.L.B.)

Notes on Macro-Lepidoptera.

Colias edusa. Swanage, September 20th. (F.G.P.)

Liminitis sibylla. None seen in usual habitat on June 10th, or later. Possibly was 'over' early this season. (G.D.D.)

- Polygonia C-album. A specimen seen in the Vicarage garden at Winterbourne Whitchurch about April 20th, by the Rev. H. H. Tilney Bassett. One taken, Weymouth, July 5th, reported to F.L.B.
- Vanessa anliopa. One caught in a garden at Tyneham, August 23rd, Mary C. Bond (see Field, September 20th, 1921).
- Melitaea aurinia. Well out, rales getting worn, females fresh, May 19th, Yetminster. One Melbury Park, May 21st. (F.L.B.)
- Pararge megoera. On wing, Yetminster, October 15th. (F.L.B.)
- Cyaniris argiolus. First brood, May 2nd; second brood, July 10th. (G.D.D.)
- Pieris rapae. On wing, Melbury, October 18th. (F.L.B.). Winfrith, freshly emerged (fourth brood?), December 9th. (F.H.H.)
- Silver Striped Hawk Moth. (Chaerocampa celerio). At Delphiniums, Parkstone, end of June. (W.P.C.)
- Sphinx convolvuli. Melbury Rectory, October 29th. (F.L.B.)
 - Zeuzera æsculi. Larva in sycamore, July. (W.P.C.)
 - Colocampa exoleta. Nine Barrow Down, April 12th. (G.D.D.)
 - Callimorpha dominula. June 14th. Morden, just emerged. (F.H.H.)
 - Ennomos fuscantaria. Males at light
 Melbury Osmund, September 13th and October 3rd.
 Apparently scarce in Dorset. (F.L.B.)
 - Cleora lichenaria. A male, fresh, Melbury Osmund, October 5th, apparently a second brood. (F.L.B.)

THE APPEARANCES OF THE SCHEDULED BIRDS, 1921.

Chard E. S. R.	:	:	;	:	:	:	:	Mar. 27	:	:
Nether- bury L. R.	May 12	:	Jan. 25	:	:	i	April 14	Mar. 17	April 23	Feb. 9
Melbury Osmond F. L. B.	May 13	Nov. 9	Jan. 24	Nov. 7	April 25	:	April 6	Mar. 24	April 27	:
Weymouth N. M. R.	June 26	:	Mar. 14	:	:	:	:	Mar. 25	:	i
Pulbam J. R.	May 12	:	Mar. 20	:	June 9	i	:	June 22	:	Feb. 17
Ansty E. E. W.	i	:	:	i	:	:	:	:	May 27	Mar. 1
Winfrith F. H. H.	May 14	:	Jan. 13	Oct. 3	May 4	÷	April 11	Mar. 18	May 4	Jan. 27
Verwood J.H.S.	May 7	Oct. 25	Jan. 25	i	April 21	Mar. 28	April 5	Mar. 25	April 21	Jan. 21
Corfe Castle G.D.D.	:	i	:	ŧ	:	:	:	•	i	:
	First seen or heard	First seen Autumn	Song first heard	First seen Autumn	First seen or heard		:	£ _	=	Song first heard
Name of Bird.	(1) Muscicapa grisola Flycatcher	(2) Turdus pilaris Fieldfare	(3) Turdus merula Blackbird	(4) Turdus iliacus Redwing	(5) Daulias luscinia Nightingale	'6) Saxicola œnanthe Wheatear	(7) Phylloscopus trochilus Willow Wren	(8) Phylloscopus collybita Chiff-Chaff	(9) Sylvia cincrea Whitethroat	(10) Alauda arvensis Skylark

THE APPEARANCES OF THE SCHEDULED BIRDS, 1921.

											_
	Chard E. S. R.	i	April 25	i	÷	:	÷	i	i	i	
	Nether- bury L. R.	i	April 21	April 12 (10)	April 25 (11)	April 22	April 28 (12)	i	April 28	Aug. 9	
	Melbury Osmond F. L. B.	:	April 12	April 13 (7)	April 13 (8)	April 29	April 29 (9)	i	May 13	:	
	Weymouth N. M. R.	i	April 27	April 21	i	:	May 15	May 23	:	:	
indo, 17	Pulham J. R.	Mar. 12	April 13	April 20	:	:	May 2 (6)	*	May 16	:	
7 7770	Ansty E. E. W.	i	April 11	April 7	ŧ	÷	;	;	;	May 27	
THE ATTERNANCES OF THE SCHEDOLED DINDS, 1721.	Winfrith F. H. H.	Jan. 19	April 24	April 4	April 29 (4)	May 4	April 29 (5)	May 10	May 1	July 19	
ES OF TH	Verwood J.H.S.	; ;	April 21	April 16 (1)	April 16 (1)	April 14 (2)	April 23 (3)	May 11	April 26	:	
TOWNS T	Corfe Castle G.D.D.	ŧ	April 12	April 2	April 19	April 19	April 28	:	i	:	
THE THE	-	Commenc- ed nesting	First seen or heard				:	2		:	
	Name of Bird	(11) Corvus frugilegus Rook	(12) Caeulus canorus Caekoo	(13) Hirundo rustica Swallow	(14) Chelidon urbica House-martin	(15) Cotile riparia Sand-martin	(16) Cypselus apus Swift	(I7) Caprinulgus europæus Night Jar or Goat Sucker	(18) Columba turtur Turtle Dove	(19) Crex pratensis Connerake or Land-rail	

 Last seen, Sept. 20th. (3). Last seen, Aug. 15th. (4). Last seen, Oct. 3rd (5). Last seen, Aug. 17th.
 Last seen, Oct. 2nd. (8). Last seen, Oct. 9th. (9). Last seen, July 25th. (10). Last seen, Sept. 25th. (11). Last seen, Sept. 28th. (12). Last seen, Aug. 13th. (1). Last seen, Oct. 9th. (6). Last seen, Aug. 2nd.

FLOWERING OF THE SCHEDIILED PLANTS, 1921

	FLOWERING	OF THE	SCHEDULED PLANTS,	CD PLANT	8, 1921.		
	Name of Plant.		Winfrith F.H.H.	Ansty E.E.W.	Pulham J.R.	Weymouth N.M.R.	Verwood J.H.S.
Œ	Anemone nemorosa Wood Anemone	First Flower	Mar. 7	Feb. 20	Mar. 25	Mar. 19	Mar. 2
(3)	Ranunculus ficaria Lesser Celandine	:	Jan. 11	Jan. 1	Feb. 4	Feb. 14	Jan. 1
<u>e</u>	Caltha palustris Marsh Marigold	:	Mar. 12	Feb. 7	Mar. 26	:	Feb. 8
(4)	Cardamine pratensis Meadow Lady's Smock	:	Mar. 12	Mar. 30	Mar. 13	April 14	Mar. 9
(5)	Sisymbrium alliaria Garlic Hedge-mustard		April 21	April 12	April 18	April 26	April 5
9	Viola Reichenbachiana Dog Violet	:	Mar. 7	Feb. 12	Mar. 30	:	Feb. 16
(7)	Stellaria holostea Greater Stitchwort	:	Mar. 1	Mar. 14	Mar. 27	:	Mar. 6
8	Geranium robertianum Herb Robert	:	:	May 24	:	April 24	April 10
6	Esculus hippocastanum Horse Chestnut	:	i	April 22	April 10	April 25	April 23
(10)	Vicia sepium Bush Vetch	:	Mar. 18	Mar. 31	:	April 12	Mar. 28
(11)	Prunus spinosa Black Thorn	:	Mar. 5	Mar. 20	Mar. 26	Mar. 19	Mar. 6
(12)	Rosa canina Dog Rose	:	:	May 28	ŧ	June 20	May 25
(13)	Cratægus oxyacantha Hawthorn	:	April 21	April 29	May 8	April 13	April 12
(14)	Hedera helix Ivy	:	:	Sept. 4	:	Sept. 27	Aug. 24
(15)	Cornus sanguinea Dogwood	:	:	June 7	ŧ	÷	May 27
(16)	Sambuens nigra		May 4	May 12	May 14	May 2	May 18

FLOWERING OF THE SCHEDULED PLANTS, 1921.

Verwood J.H.S.	July 4	June 3	June 5	June 8	Jan. 23	June 8	May 8	May 4	July 5	June 21	July 15	Mar. 2	Jan. 7	Mar. 15	Mar. 28
Weymouth N.M.R.	:	i	June 5	June 18	i	:	May 21	May 10	ì	June 27	:	May 3	Mar. 1	April 14	Mar. 24
Pulham J.R.	;	;	ì	:	:	1	i	i	:	:	:	Mar. 31	Jan. 20	Mar. 19	Mar. 25
Ansty E.E.W.	July 29	:	June 15	June 7	Feb. 20	June 29	May 12	:	July 11	June 25	i	Mar. 15	Feb. 7	Mar. 10	Mar. 14
Winfrith F.H.H.	July 16	July 4	:	:	Feb. 24	ŧ	÷	i	i	:	:	April 2	Jan. 28	April 5	Mar. 7
	First Flower			:	. :	=	£	\$	2	:		66		**	:
,	:	i	ŧ	ŧ	:	:	:	:	:	:	:	:	:	i	:
Name of Plant,	Dipsacus sylvestris Wild Teasel	Scabiosa succisa Devil's Bit	Centaurea nigra Knapweed	Carduns arvensis Field Thistle	Tussilago farfara Coltsfoot	Achillea millefolium Yarrow	Chrysanthemum leucanthe- mum Ox-eye Daisy	Hieracium pilosella Mouse-ear Hawkweed	Campanula rotundifolia Harebell	Convolvulus sepium Greater Bindweed	Mentha aquatica Water Mint	Nepeta glechoma Ground Ivy	Corylus avellana Hazel	Primula veris Cowslip	Scilla nutans Bluebell
	(17) D	(18) S) (19) C	(20) C	(21) T	(22) A	(53) C	(24) H	(25) C	C (36)	(27) M	(28) N	C (62)	(30) Pi	(31) Sc

THE APPEARANCES OF THE SCHEDULED INSECTS, 1921.

1										
	Name of Insect.		Corfe Castle G.D.D.	Winfrith F.H.H.	Ansty E.E.W.	Pulham J.R.	Weymouth N.M.R.	Melbury Osmond F.L.B.	Nether- bury L. R.	Verwood J.H.S.
1	Melolontha vulgaris (Cock-chafer).	First Seen	:	May 12	June 6	:	May 11	:	May 12	May 12
22	Lampyris noctiluca (Glow-worm).	:	:	June 12	:	:	:	:	April 23	June 11
က	Apis mellifica (Common Hive Bee).	£	ŧ	Feb. 22	Mar. 1	April 1	Mar. 18	÷	Mar. 19	Feb. 20
4	Vespa vulgaris (Wasp)	First Seen (Hiber-	:	April 2	April 26	:	April 13	:	May 23	April 23
73	Pieris rapæ (Small White Butterfly).	First Seen	April 3	÷	Mar. 25	April 10	Mar. 24	April 6	Mar. 18	Mar. 24
9	Anthocharis cardamines (Orange-tip Butterfly).	£	April 27	:	June 6	April 14	May 13	April 12	April 16	April 22
-	Epinephile janira (Meadow-brown Butterfly).	:	June 16	June 10	i	:	May 15	June 10	June 15	June 11
∞	Satyrus megæra (Wall Butterfly).	6.	April 27	May 12	June 6	:	May 3	May 2	May 2	April 30
o	Gonepteryx rhammi (Brimstone).	First Seen (Hiber-	Mar. 26	April 1	Mar. 26	Mar. 24	:	April 1	April 28	Mar. 25
10	Vanessa io (Peacock Butterfly).	First Seen (Hiber-	Mar. 24	April 1	Mar. 25	Mar. 24	April 10	:	April 4	Feb. 16
H	Vanessa atalanta (Red Admiral).	First Seen (Hiber-	ŧ	:	:	:	June 5	ŧ	June 28	:
12	Vanessa cardui (Painted Lady).	First Seen (Hiber-	:	June 12	:	:	Sept. 24	, i	Aug. 21	:
13	Callimorpha jacobeæ (Cinnabar Moth).	nateα) First Seen	May 12	į	:	:	÷	÷	June 17	May 21
14	Abraxas grossulariata (Currant Moth).	:	i	July 19	i	i	July 6	:	July 18	÷
					E.		_			



Returns of Rainfall, &c., in Dorset in 1921.

By the Rev. H. H. TILNEY BASSETT, R.D.



MOST exceptional year, 1921 will be remembered, from a meteorological point of view, for its abundant sunshine, constant rainless periods, and its abnormally high temperatures, a maximum

temperature of 80 and above being recorded in each month from May till October, inclusive; the maximum of 84.0° in the shade in London, so late in the year as October the 6th, being I believe without previous record.

The winter months were very mild. The average daily maximum temperature for January was as high as 50.8°. Only four slight frosts occurred, and no snow was observed. February 23rd produced a temperature of 59.0°, and at Leamington (Warwickshire) 62.0°, and London 61.0°, very high temperatures for the time of year. But the most remarkable feature of the year was its rainfall, which was from 15 to 20 inches below the average and in some districts even more. The dry conditions began in February, and continued more or less till the end of the year.

There were very long spells of rainless weather, the longest periods being from February 1st to 24th, March 29th to April 12th, June 1st to 25th, June 26th to July 12th, September 18th to October 12th. The average rainfall, calculated from the stations marked with an asterisk in the tables, is 17.922ins.; the average for the 66 years, 1853 to 1921, being 34.503ins.

The heaviest fall in the 24 hours, throughout the County, occurred on September 11th, the greatest fall being registered on that day at 13 stations. Eleven observers record the greatest fall on November 16th; six observers, January 30th; four, August 21st; and two, January 1st. The heaviest fall in the 24 hours was registered at Tolpuddle, 1 · 22in. on August 21st.

Days with fall of one inch or more in 24 hours:—Seven stations record one such day.

The maxima of wet days were recorded at Lyme Regis, 165; Wimborne, 163; Turnworth, 161; Sherborne Castle, 158; the minima, Horton Vicarage, 95; Blandford, 103; Creech Grange, 108.

There was a remarkable absence of thunderstorms during the year, a feature of several years past.

OBSERVERS' NOTES.

ABBOTSBURY.—The rainfall in 1921 is by far the lowest ever taken here. The next lowest was in 1905, when 22·27in, was registered. The average yearly rainfall for the last 24 years is 29·83in.

JAS. E. P. WHITE.

BEAMINSTER.—The Beaminster record commenced in 1873 and has been continued ever since. To the end of 1920 the average yearly rainfall was 38.61in. The rainfall of 1921 was 21.29in. only—or 17.32in. below the average of 48 years. The year's drought was intensified by the fact that the rainfall of August to December, 1920 (both months included) was 4.88in. below the average of that period. The previous driest year was 1887, when 28.26in. was recorded. The wettest day of the year was January 1st, with a fall of .73in.

FIENNES TROTMAN.

BLOXWORTH HOUSE.—I noticed thunder on 30th April, 13th July, 20th and 21st August, 2nd October, and hail on 28th May.

F. G. A. LANE.

CHICKERELL, MONTEVIDEO.—April 15th, 16th, 17th, some snow and hail on each day, especially the 15th. July 13th, thunder and lightning in the evening. August 22nd, a little thunder and lightning in early morning. September 11th, lightning late at night.

Helen M. Richardson.

DORCHESTER, WOLLASTON HOUSE.—A most exceptional year throughout the whole county. The total rainfall measured at Wollaston House, Dorchester, was 21 '48in.; at Dorchester Waterworks, 21 '57in.; the accepted annual average being 37 '36in. The driest periods were the months of February, two days rain only, giving 0 '08in.; 1st June to 14th July, three days, total 0 '36in.; the two months September and October taken together, 11 days, total 1 '95in.

The summer was remarkable here for almost complete absence of thunderstorms, and a fall of one inch of rain was not measured on any day throughout the year.

J. E. ACLAND.

MAIDEN NEWTON, WYNFORD HOUSE.—Only one thunderstorm on July 14th. A fall of snow on 7th November.

This has been the driest year since the record was kept here, the normal rainfall of this place, which lies just two miles N.E. of Eggardun Hill, is from 42 to 46 inches and is generally the highest in Dorset recorded in the British Rainfall Report. This year the rainfall is 17 inches under the normal. The season however has suited this locality, both on the farm and in the garden.

Wynford.

STURMINSTER MARSHALL.—December 31st, 1921; Winterborne river quite dry, the Stour river very low, lower than any one knowing it at any time of the year. In my tube well began to rise December 27th, 1921.

JAMES CROSS.

WINTERBORNE WHITCHURCH.

January.—One of the mildest Januarys on record, the temperature rising to 50.0° and above on 22 days; the highest was registered on the 9th, 56.0°. The coldest day was the 14th, maximum, 44.0°. The lowest was recorded the night of the 14th, 28.0°. The warmest night was that of the 28th, with a minimum of 49.0°. Rain fell on 21 days, heaviest fall in 24 hours, 0.75in. on the 30th.; no snow was observed during the month. Total rainfall, 4.02in.

February.—The great feature of the month was the exceptional drought. From the 1st to the 24th no rain fell. The heaviest fall in the 24 hours occurred on the 25th, 0.12in. The warmest day was the 23rd, when the temperature rose to 59.0° in the shade. The coldest night was the 26th, when the thermometer fell to 26.0° . The coldest day was the 7th, with a maximum temperature of 36.0° . The warmest night the 16th, 45.0° . Total rainfall, 0.26in.

March.—A very mild quiet month, though there were no exceptionally warm days. On two days only did the temperature fail to reach 50·0° and above, in the shade. Rain fell on 17 days, the heaviest fall in the 24 hours occurred on the 13th, 0·30in. The highest temperature was observed on 25th, 62·0°. The lowest on the night of the 24th, 26·0°. The coldest day was the 7th, maximum 45·0. Warmest night, 15th, 46·0°. Total rainfall, 1·88in.

April.—There were three distinct heat waves during the month. 1st—4th; 10th—13th; 26th—May 2nd. Rain fell on nine days. Heaviest fall in 24 hours was on the 16th, 0·40in. Snow fell on the 14th, 15th and 16th; quite a heavy fall fell on the 15th between 2 and 3 p.m., when the ground was covered for a while; During the storm the thermometer fell to 32·0°. There was a thunderstorm on the morning of the 28th, moving S.E. to N.W. to the E., and another thunderstorm on the 30th, 5-15 p.m., moving E. to W, to the S. Neither storm

was of any great intensity. Highest temperature occurred on the 28th, 73.0°. The lowest, night of 19th, 25.0°. Total rainfall, 0.88in.

May.—Rain fell on 12 days. The greatest fall in the 24 hours, 0·47in. on the 7th. There was a heat wave which gathered in intensity commencing on the 18th, and culminating on the 25th with a shade temperature of 80·0°. The coldest day was the 4th, maximum 52·0°. The hottest day was the 25th, 80·0°. The coldest night was the 4th when the temperature fell to 30·0°. The warmest night was that of the 14th, minimum 52·0°. On the 28th there was a very heavy fall of hail at 10-30 a.m. the ground being covered for some while; the temperature fell to 31·0° the night of the 28th. Total rainfall, 2·32in.

June.—The month of June will be remembered for its warmth and its drought. Rain fell on only one day, 25th, when 0.80in. was measured. There were three days in which the temperature reached 80.0° or more in the shade. The highest observed temperature occurred on the 25th, 82.0°. The lowest on the night of the 7th, 39.0°. There was distant thunder and lightning during the night of the 25th. Total rainfall, 0.80in.

July.—A very warm and dry month. On only one day did the thermometer fail to reach 70°0° and above in the shade. Rain fell on eight days. The heaviest fall in the 24 hours was 0°12in. on the 17th. A very deep depression passed over the county from W. to E. on the 29th, the barometer, corrected to 32 sea level, falling as low as 29°46. It was, however, accompanied with very little rain, which was remarkable, but almost a hurricane blew from the N.W. and S.W. for some hours. The thermometer reached 80°0° and above on 12 days. The highest reading being registered on the 12th, 90°0° in shade. There was a good deal of thunder on the morning of the 15th, to the W., distant. The coldest night was that of the 4th, 41°0°. Total rainfall, 0°49in,

August.—Rain fell on 13 days. Greatest fall in 24 hours occurred on the 5th, 0.40in. On the evening of the 20th there were several peals of thunder to the S., distant. The highest temperature observed occurred on the 19th, 81.0°; the lowest, the night of the 30th, 34.0°. The coldest day was the 16th, maximum 64.0°. The warmest night was that of the 1st, 61.0°. Total rainfall, 2.20in.

September.—Summer conditions prevailed throughout the month. Rain fell only on four days. The heaviest fall:was on the 11th, when 0.91in. was registered. Between 9 and 12 p.m., on the night of the 11th, there was quite a hurricane of wind from the N. and N.W. with lightning at times. The thermometer reached 70.0° and above in the shade on 16 days; 80.0° and above on three days. The highest temperature recorded was 83.0° on the 9th. The lowest was registered on the night of the 28th, when the thermometer fell as low as 28.0°. The coldest day was the 17th when the temperature did not rise above 55.0°. Total rainfall, 1.18in.

October.—A remarkable month for abnormal high temperature for time of year. The thermometer reached 70°0° and above for the first ten days of the month, recording 80°0° in the shade on the 6th, and reaching 84°0° in London, and 82°0° in Bath, This I believe to be the highest ever yet recorded for so late in the year. Rain fell on six days. The heaviest fall in the 24 hours being 0°29in. on the 23rd. The hottest day, the 6th, when the temperature was 80°0° in the shade; the lowest being 28°0° on the night of the 24th. Total rainfall, 0°93in.

November.—Heavy dull weather associated with much fog, was a special feature of the month. There was a remarkable touch of severe wintry weather between the 8th and the 12th; snow falling heavily on the morning of the 8th to the depth of two inches between 6 and 8 a.m. There were 12 days on which either rain or snow fell; the heaviest fall in the 24 hours occurring on the 16th, 0.78in. The hottest day was the 3rd,

when the temperature rose to 61.0°. The lowest temperature observed was 16.0° on the night of the 12th. Total rainfall, 3.59in.

December. — The weather throughout the month was generally mild, with a rainfall considerably below the average. Rain fell on 15 days. On no occasion were the falls heavy. The greatest fall in the 24 hours being 0°27in, on the 26th. The highest temperature was observed on the 17th and 18th, 56°0°. These were very high readings for the time of year. The lowest registered was 25°0° on the night of the 25th. Total rainfall, 1°63in.

Total rainfall for the whole year, 20.18in.

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Station.	*Abbotsbury, New Barn *Beaminster, Hamilton Lodge Bere Regis, Barrow Hill Barweans Rememe Hanse	Paraboluc, Boune varies, Gas Works. "Blandford"	**Chickerell, Montevides Corfe Castle, Bucknowle House Creech Grange ** Poorchester, Wollaston House	Dorchester, Kingsoote Gussage St. Michael, Manor *Holme, Base Horron Vicarace	House Garden	0	Sutunivser Marshall Tobjuddie Topjuddie "Warehan Warehan "Warehan "Winborne, Codford House "Winterborne Whitchurch

* The averages have been calculated from Stations marked with an Asterisk,

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* The averages have been calculated from Stations marked with an Asterisk,

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